

Exhibition Room, June
THE CHEMIST AND DRUGGIST, FEBRUARY 15, 1930.



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No. 2610.

FEBRUARY 15, 1930.

Vol. CXII.

Can be Refilled

The "Allenburys"

Pocket Iodine

Just like a fountain pen. Clean in use.
No Brush required. Convenient to carry.
Fits the vest pocket.



Contains
B.P.
Tincture
of Iodine



Packed in outers
containing one dozen

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Allen & Hanburys Ltd. :: London, E. 2

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ACTUAL
SIZE

3 powerful Pepsodent points

1 Heavily advertised

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2 A popular demand

Thus Pepsodent enjoys a popular demand. A demand which has been built up over a period of years. A demand which is always steadily increasing. And which is regular. It employs no "stunts." It is 'built solid.'

3 A generous profit

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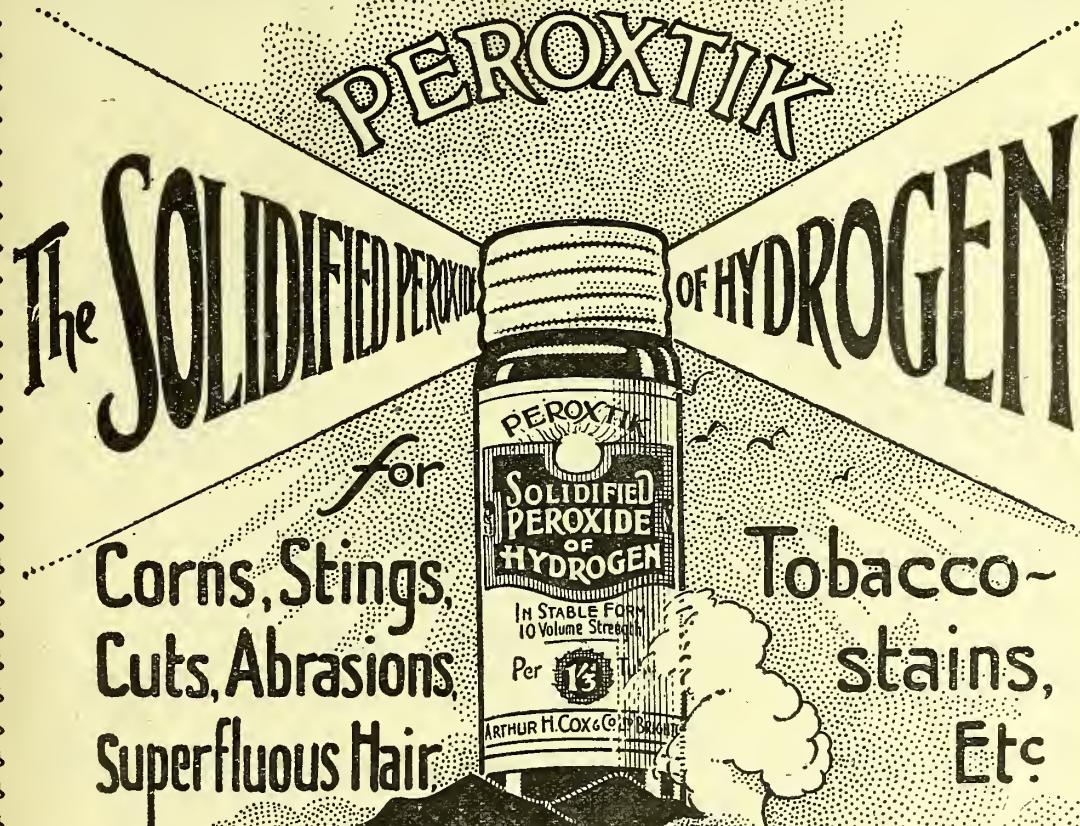
Tie up with the Pepsodent advertising. Feature the Pepsodent display regularly in your windows—show it on your counters. Get the full benefits from the sale of this leading and popular tooth paste. Get our latest window display to-day.

**Buy Pepsodent
regularly on the
best terms and
make a clear profit**



PTRADEepsodent MARK
The Scientific Dentifrice

The Pepsodent Co., Dept. 280, India House, 8, India Street, London E.C.3.



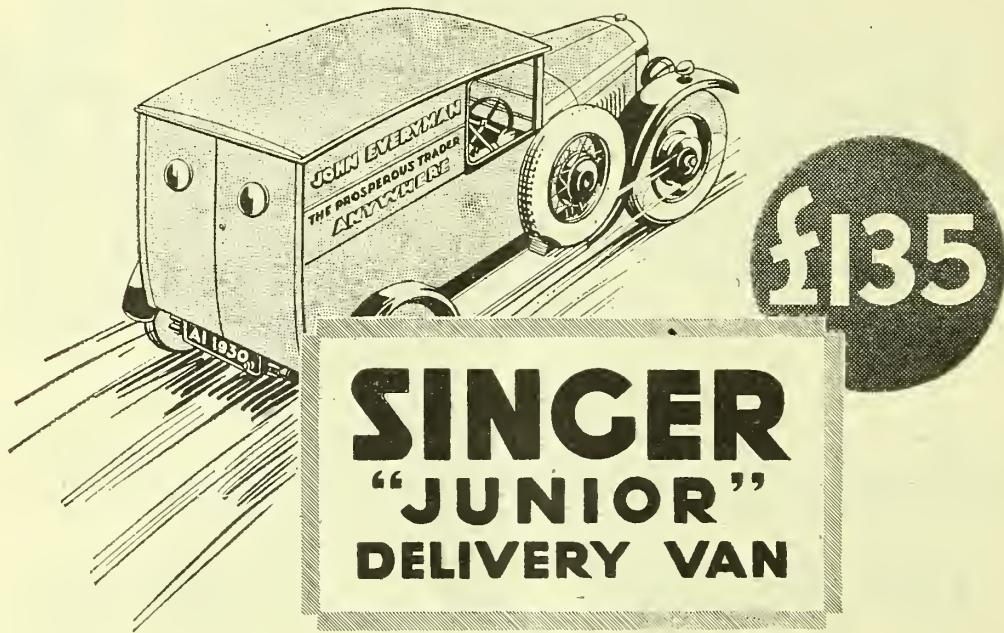
As Advertised in the
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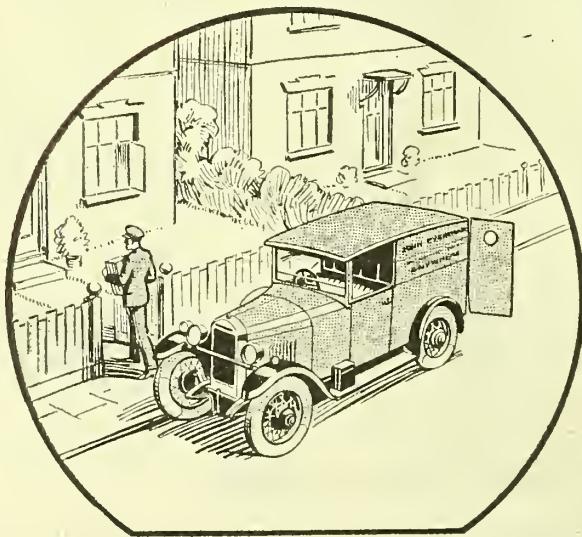
10/- per Doz. - Retail 1/3 per Tube

ARTHUR H. COX & CO LTD
Manufacturing Chemists
BRIGHTON ENGLAND

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**COSTS ONLY 1° PER
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Always ready for work at any hour of the day or night, the SINGER Van will prove to be your most profitable servant. Horse-drawn vehicles are absolutely out-classed in every way by this speedy little van, and your customers will quickly appreciate the safe and prompt delivery of goods.

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All-weather protection for the driver, rigid side screens, two-piece windscreen with wiper, sliding communication door, speedometer, and spare wheel. A generous interior: Length, 3 ft. 9 ins. Width, 3 ft. 7 ins. Height, 3 ft. 5 ins. Internal expanding brakes on all four wheels. A carrying capacity of 5 cwt. Petrol consumption averages 35 to 40 m.p.g. Tax, £10. Standard body colours—Blue, Maroon, and Brown and Fawn—other colours to choice at extra cost.

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Completely illustrated, and containing full particulars of the JUNIOR Van.

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LONDON SHOWROOMS: STRATTON HOUSE, PICCADILLY, W.I.

At last LA CREME COTY in tubes!

Book your
orders now

CREME Coty in tubes has been eagerly awaited by women throughout the world, who realise the usefulness of this packing.

The tubes are in two sizes—the smaller being especially designed for carrying in the handbag, whilst the larger one is eminently suitable for travelling purposes or use at home. Creme Coty is still obtainable in the glass jar for use on the dressing table.

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KAYLOID
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2. A quarter-million interested people are receiving free samples.
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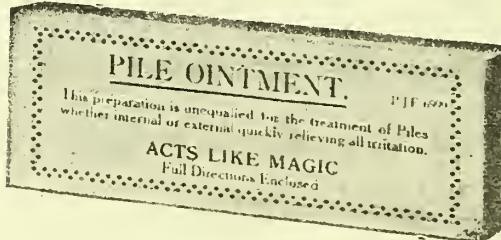
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— ACTS LIKE MAGIC —

EACH PACKED
IN A BOX
with vulcanite
introducers

½ doz. boxes packed
in a show box



RETAIL PRICE 1/3 per tube

PRICE
9/- per dozen

In gross quantities

8/6
per dozen

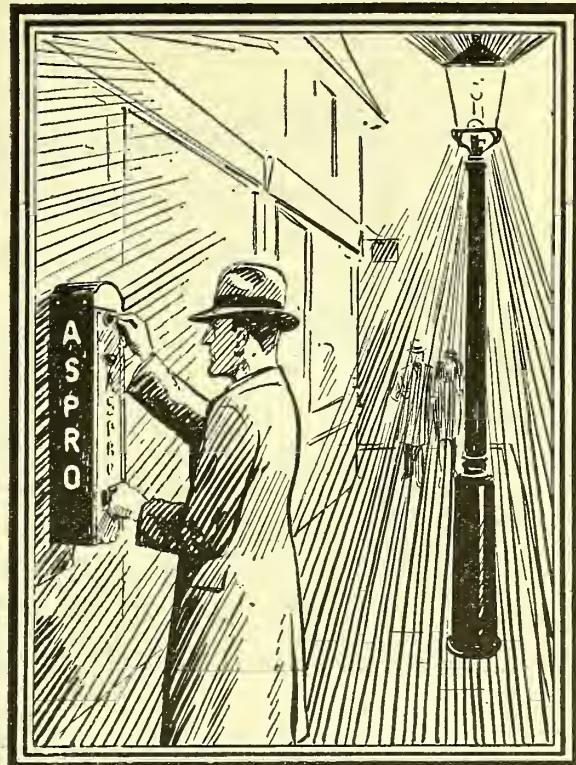
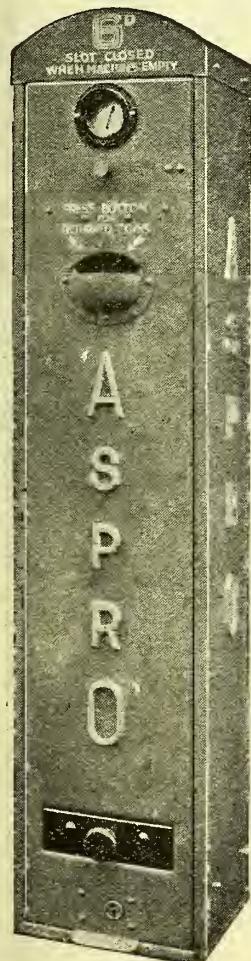
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MANUFACTURING CHEMISTS
27/35 DUKE STREET, LIVERPOOL

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*Super Automatics
Backed by
"Aspro" Advertising
will do this for you*



Don't lose "ASPRO" sales because your shop is closed. Install one of the handsome mauve-coloured steel-plated Super-Automatic "ASPRO" Machines. It is a business-bringer and money maker. Out of the crowds that pass your shop after closing time there are many potential buyers. When your customers know that you can give this 24-hour medicinal service they will send out for "ASPRO" in emergency, and buy it Super-Automatically without cost or trouble to you. Start to make money Super-Automatically. Fill in the Coupon now.

COUPON

The Sales Manager,

The Super-Automatic Machine Co., Ltd., Mitcham, Surrey.

Please send, without obligation, fullest details of your 'Aspro' Machines and your Easy Payment Terms.

Name, or style of firm.....

Address

THERE ARE FEW NATIONALLY ADVERTISED PRODUCTS WHICH WILL SHOW YOU THE PROFITABLE MARGIN THAT

Roboleine

OFFERS YOU. OUR TERMS GUARD YOU AGAINST UNSOLD STOCKS.

ROBOLEINE is the most popular of the "malt" foods, not only because it is the best of the kind but since it is economical in use. A teaspoonful is a dose. Our keyed advertising shows that there are *a thousand new customers for ROBOLEINE every week.*

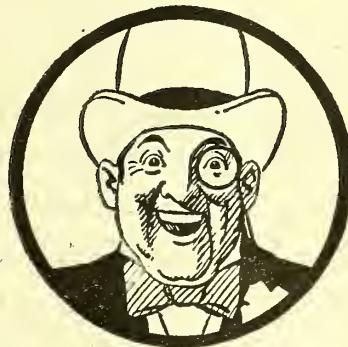
It is for you to step in, meet the demand and take the handsome profits. A P.A.T.A. line which is kept to the Chemists, as far as can be secured. Has had the confidence and support of the Medical Profession for nearly a generation.

Terms and particulars from :

Oppenheimer, Son & Co., Ltd.
Handforth Laboratories
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London, S.W.9

When
we say that we are doing
**BIG
BUSINESS**
with
Moorlands

it also means that someone else is doing Big Business with them, and that someone else is the Pharmacist. Obviously, if he wasn't selling them we shouldn't be doing so, should we?



If you are in our district at any time come in and see our happy band of workers busy turning out the huge quantities of Moorland Heart Shape Tablets



Adeps Benzoatus
Adrenalin
Amylopsin
Beef Juice*
Carmex
Catgut*
Cerebrin
Corpus Luteum*
Diastase (Animal)
Digestive Ferments
Duodenin
Enzymes*
Galactis
Hæmoglobin
Insulase*
Lactated Pepsin
Lecithin
Liver*
Lymphatic
Mammary
Mam-Ovarian
Mem-Placenta
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Multigland*
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Ovarian*
Ovarian Residue*
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Ox Gall
Pancreas
Pancreatin
Parathyroid*
Parathyroid Compound*
Pepsin
Peptone*
Pineal
Pituitary, Whole Gland*
" Anterior Lobe*
" Posterior Lobe*
" Compound*
Placenta
Prostate
Red Bone Marrow*
Renal Cortex
Spleen*
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Suprarenal*
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Thymus
" Compound
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Trypsin

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FORTY-PER-CENT

SPLEEN SOLUTION

IN THE TREATMENT OF

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—SEE—

Dr. Thos. M. Paul, in "The Urologic and Cutaneous Review," Vol. XXXIII, No. 11, 1929.

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Concentrated Fluid Extract of LIVER

ONE OUNCE (the Daily dose) = HALF POUND
FRESH WARM CALF LIVER

PALATABLE,—READY TO TAKE

The only stabilised FLUID EXTRACT accepted by the Council on Pharmacy and Chemistry of the American Medical Association for inclusion in their list of New and Non-Official Remedies.

Write for New Booklet.

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LIMITED

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Telephone: NATIONAL 2424.

Maw's Page



Every Mother Knows



Every mother knows the anxiety of constantly watching her children's health; the worry that comes with a temperature, a cold, or a cough. Show any mother a Maw's Drip-Feed Lamp and she recognises in it a friend and an ally—something that will help her to keep her children healthy and relieve her of most of her anxiety. Every mother amongst your customers is a probable purchaser of a Drip-Feed Lamp.

And it's a simple matter to tell mothers all there is to know about the lamp. You can do it without any trouble whatsoever.

Simply put the demonstration lamp, supplied free with orders to the wholesale value of 30/-, to work on your counter. It will tell its own story and actually make sales for you.

Every sale of a Drip-Feed Lamp brings profit and more profit, for it inevitably leads to steady repeats for Aero-Cotarol Vaporant. Further, it means sales of other lamps because, whenever a Maw's Drip-Feed Lamp is sold, it gives such satisfaction that its user is sure to recommend it to others. Now is the time to sell Drip-Feed Lamps and Aero-Cotarol. Send us your order without delay.

PRICES :

	WHOLESALE.	RETAIL.
	Doz.	Each.
Drip-Feed Lamp ..	20/-	2/6
3-doz. lots ..	19/-	

	WHOLESALE.	RETAIL.
	Doz.	Bottle.
Aero-Cotarol—		
Large size	2 3
Small size	1 3

Night Lights, specially suitable for the Drip-Feed Lamp in boxes of six .. per doz. boxes, 6/-

Maw's Drip-Feed Lamp (Pat. app. 36986/28).

S. Maw, Son & Sons, Ltd.,
Aldersgate St., London,
and Barnet.



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THE NEWLY-INTRODUCED SIXPENNY
SIZES OF
MARSHALL'S LYSOL

AND
HINDS HONEY & ALMOND CREAM

ARE PROVING AN ENORMOUS SUCCESS

The public have quickly realised the excellent value they get in these handy packages, but when they become regular users they will buy the larger and more economical packs—that's how the sixpenny sizes will help you.

There is also another way. With the addition of these sixpenny sizes it is a simple matter to order in carriage-paid quantities, which enables you to take advantage of the benefits of direct buying.

If you have not already got stocks write for a 1930 price list to-day and see how easy it is to make up a direct order.

LYSOL LIMITED - LONDON, S.W.20



EVANS,



EVANS' BARIUM SULPHATE FOR X-RAY DIAGNOSIS.

Evans' BARIUM SULPHATE is a special preparation made for a specific purpose and for that purpose alone, namely, for administration in X-Ray diagnosis. It is NOT a commercial preparation, made from raw materials. IT IS A FINE CHEMICAL, prepared from Pure Chemicals. Evans' BARIUM SULPHATE allows immediate and complete diffusion throughout the meal; affords a uniform and sustained suspension; yields a sharp, perfectly defined SHADOW. Evans' BARIUM SULPHATE has been developed to achieve one object,

**EXCELLENCE OF RESULTS IN
X-RAY DIAGNOSIS.**



EVANS

BARIUM SULPHATE

A WORD TO MANUFACTURERS

WHO HAVE NOT AS YET ADVERTISED THEIR PRODUCT

If you are a Manufacturer who has not as yet sold goods through Advertising to the Public, *The Daily Mail* is ready to advise you as to ways and means by which you can test the value of Advertising in the columns of this newspaper alone.

It will tell you how you can market your goods on the strength of the Advertising which you would do in *The Daily Mail*, and it will also explain to you, without cost or obligation on your part, how this Test Advertising Campaign can be done for a moderate sum of money.

The Daily Mail believes that there are many hundreds of Manufacturers in the British Isles who are not as yet informed of the low selling cost of the advertised product and the stability which it gives their business through the Public being familiar with their products by name.

Readers of *The Daily Mail* buy as many goods as they can under Trade Mark names. They prefer them. They know that the manufacturer of the product is proud of it, because he has identified it.

Remarkable success in the selling of goods has been made by advertisers in *The Daily Mail* alone. The influence of this newspaper is familiar to prac-

tically every Retailer throughout the British Isles, and he displays in his windows the goods of advertisers who use *The Daily Mail*, and the advertisements which appear in *The Daily Mail*, in preference to goods advertised through any other medium.

Evidence of these facts is ready to be placed before any manufacturer whose product should be advertised.

Newspaper Advertising is the most economical form of selling, and *The Daily Mail* is the cheapest by results, in its field.

*Please address enquiries to
the Advertisement Director,
The Daily Mail, Northcliffe
House, London, E.C.4*

"AYRTOID" IODISED THROAT TABLETS

These famous tablets are now issued in tins containing 36 tablets to retail at **8½d.** per tin.

Beautifully packed in printed tins with neat design in red, black and buff. 12 tins in special counter display outer.

Per dozen tins	...	...	...	4/9
Per gross tins	...	...	...	51/-

Also supplied loose at :—

Per lb.	2/10	14 lbs. @	2/9
28 lbs. @	2/8	56 lbs. @	2/7

'Ayrtoid' Iodised Throat Tablets

are world known and enjoy immense sales particularly in the British Dominions.

Until fairly recent times Iodine treatment was purely external. AYRTON's method of incorporating free Iodine in a medicated tablet has opened up a treatment of the throat membrane which makes full use of the healing, soothing, inflammation reducing, deodorant and aseptic virtues of Iodine.

The tablets include other valuable ingredients, each introduced for specific purposes, so that the compounded medicament takes a higher place than that held by any other throat treatment.

SULPHUR & YEAST TABLETS

A QUICK SELLER FOR

PIMPLES, ANÆMIA, BOILS, SKIN BLEMISHES and as a BLOOD ENRICHER particularly at CHANGE OF SEASONS.

Smartly Cartoned (approx. 2 ozs.)

1 doz.	6 doz.	12 doz.
--------	--------	---------

Per doz.	4/6	4/3	4/-
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In Bulk (Free Show Jar with first 7 lbs.)

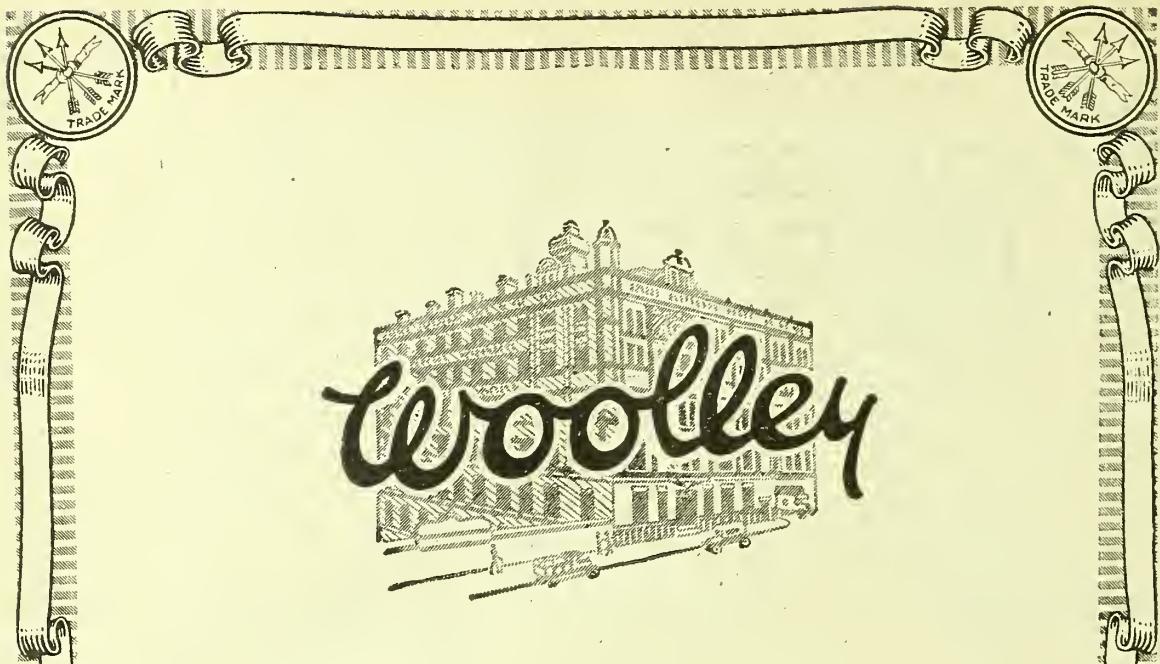
7 lb.	14 lbs.	28 lbs.	56 lbs.	112 lbs.
-------	---------	---------	---------	----------

Per lb.	1/9	1/8	1/7	1/6	1/4
---------	------------	------------	------------	------------	------------

Sulphur and Yeast Tablets —something new for the Spring.

The vitamin "B" content of yeast and its tonic qualities combine so well with the purifying virtues of sulphur that the combination has quickly come into prominence for administering to those whose health receives a set-back at the change of seasons.

AYRTON, SAUNDERS & CO., LTD.
34 HANOVER STREET - - - LIVERPOOL



We are now able to supply
**NATIONAL MARK
MALT EXTRACT**
 AND
MALT EXTRACT with COD LIVER OIL

on the following terms:

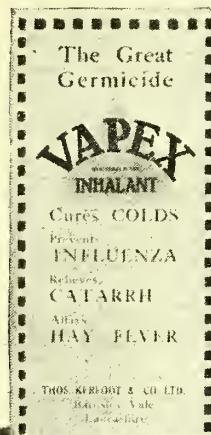
Malt Extract	Fixed Retail Price.	Malt & Oil	Fixed Retail Price.
1 lb. 10/6 per doz.	1/2	1 lb. 11/- per doz.	1/3
2 lb. 18/6 "	2/2	2 lb. 19/6 "	2/4
4 lb. 35/- "	4/3	4 lb. 37/- "	4/6

These prices are subject
to contract rebates.

JAMES WOOLLEY
SONS & CO., LTD
VICTORIA BRIDGE, MANCHESTER



Printed in natural colours, simply erected and of a convenient size this counter cut-out will attract the eyes of your customers wherever it is shown.



VAPEX
Cures Colds. Prevents "Flu"
Put a drop on
your handkerchief **2/- AND 3/-**

THIS "Vapex" counter display will prove well worth while. Advertisements are appearing in more than 50 nationally circulated publications and your customers will appreciate a gentle but effective reminder that you can supply.

To EXPORT BUYERS—Orders and enquiries should be addressed to our Export Agents, Wm. Alfred Jones, Ltd., West India House, Liverpool. Visitors to the British Industries Fair in London are invited to inspect Stand B 30/41 where a wide range of Kerfoot specialities is to be seen.



THOMAS KERFOOT & CO LTD.
BARDSTLE VALE, LANCASHIRE,
& Bardsley House, London, N.1
ESTABLISHED 1797.

D/592

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GUARANTEED PURE ENGLISH PEPPERMINT OIL

Grown & Distilled from Mitcham Plants
By

**Chivers & Sons Ltd.,
Histon, Cambridge, England.**

SAMPLE AND QUOTATION ON REQUEST FROM THE SOLE SELLING AGENTS
BRUCE STARKE & CO., 16 WATER LANE, GREAT TOWER ST., LONDON, E.C.3

Established 1795.
LAUTIER FILS

Works: GRASSE (France) & BEYRUT (Syria).

Essential Oils and Synthetics.
All Raw Materials for Perfumery.

Olive, Peach Kernel, Sweet Almond Oils
Floral Waters.

Sole Agents for :—

PAOLO VILARDI *Messina Oils:*
Lemon, Bergamote, Sweet Orange, etc.

S.A. FLORFE *Spanish Oils:*
Spike Lavender, Rosemary, Thyme,
Pennyroyal, etc.

C. MINTCHEFF & KETCHEDJIEFF
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Wholesale and Export only.

LAUTIER FILS, Ltd., 107 Commercial St., London E.1.
Tel. Add.: "Lautiert, Phone, London." Phone: Bishopsgate 8271/2.



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HEAD
OF ALL
OTHERS**

TRADE TERMS

12/- doz.
Retail at 18/-
20/- doz.
Retail at 30/-

If unobtainable from your
wholesaler write direct to

**ANZORA PERFUMERY
CO., LTD.,**
London, N.W.6.

A supply of attractive
Showcards and Cutouts
for Window Display sent
post free.

ANZORA
MASTERS THE HAIR

Anzora Cream, for greasy
scalps, will not soil hat linings
or pillows. Anzora Viola is
for dry scalps and contains a
little oil of violets.

GAL Toilet Preparations

Retail Prices in Great Britain and Northern Ireland

1726 Gal Toilet Soap single tablet	1/-
1730 Gal Toilet Soap—Visitors' Size	box (3 tablets)
1742 Gal Face Powder	box 2/-
SHADES: Blanco, Natural, Rachel 1, Rachel 2, Rosa, Ocre, Ocre Rosado	box 3d.
1751 Gal Vanishing Cream	pot 2/-
1753 Gal Cold Cream	pot 2/-
1777 Gal Almond Paste	bottle 3/-
1770 Gal Perfume	bottle 13/-
1740 Gal Eau de Cologne	bottle 8/-
1759 Gal Bath Salts	bottle 30/-
1750 Gal Tooth Paste	tube 6/-
1731 Gal Shaving Stick (metal container)	stick 1/6
1732 Gal Shaving Stick (cardboard container)	bottle 10d.
1737 Gal Liquid Brilliantine (One body)	bottle 2/3
1736 Gal Liquid Brilliantine (Two bodies)	bottle 3/-
1772 Gal Solid Brilliantine	pot 2/-
1735 Gal Liquid Shampoo	bottle 2/-
1738 Gal Hair Lotion—"Heno"	bottle 12/6
1733 Gal Hair Lotion—"Colonia"	bottle 12/6
1765 Gal Hair Lotion—"Talavera"	bottle 12/6
1767 Gal Hair Lotion	

PERFUMERIA GAL
MADRID, LONDON, BUENOS AIRES
LONDON OFFICE: 76, STRAND, LONDON, W.C.2



PERFUMERIA
GAL

All *GAL* Toilet Preparations
are now selling

Following the popular success of *Gal* Toilet Soap the preparations listed above are now being introduced. Each product is packed in the familiar "sunshine yellow" wrapping. Send your order now

REMEMBER: Every sale brings you 33½% profit on turnover. In the case of *Gal* Toilet Soap (Catalogue No. 1726) the discount is on the box price.

Retailers are invited to send for attractive display material.

Madrid—London—Buenos Aires. London Office: 76, Strand, W.C.2

TRADE
DISCOUNT

33½%

F.C.146

**4d. Soap
Free**

P.A.T.A.

3d.

TUBES

containing

a
full half
ounce of
"VELDT
CREAM."

A well-kept hand is the hall mark of refinement!

**4d. Soap
Free**

"Veldt Cream"

3 doz. SHOW BOXES
carriage paid, or order 3 doz. **18/-**
from your patent house. PER GROSS

Enclosed with each tube is a coupon which when filled up the chemist is authorised to give absolutely free a full-size 4d. Tablet of "VELDT CREAM" Soap each time a 3 oz. bottle of "VELDT CREAM" is purchased. We redeem these coupons so that a chemist gets his FULL PROFIT.

Red
Rough
Chapped
Hands
made
Smooth
and
White
in a
Single
Night

Sole

Manufacturers:

The "Veldt" Laboratory.

Louth,
England

SWAN-DOWN

COLD CREAM and VANISHING CREAM

RETAIL PRICE 1/3 PER JAR.
Less usual trade discounts.

OUR ADVERTISING CAMPAIGN

for these two new
SWANDOWN
creations has just
commenced.

Obtain a supply at
once from your usual
wholesaler in order
to meet the demand.

If any difficulty
write to :—

HENRY TETLOW COMPANY
84 Leadenhall Street, LONDON, E.C.3.



Sunshine

Remedies

including the now famous
ANTI-ACID TABLETS
"TOXINICON"
for Rheumatic diseases

GOLDEN-RAY
SHAVING SOAP
the only soap with an Antiseptic Vaseline centre.

SOLEIL D'OR PERFUME
AND TOILET PREPARATIONS

WRITE FOR DESCRIPTIVE BOOKLET

Sunshine Remedies Ltd.
8 West Halkin Street, S.W.1
Telephone: Sloane 4133.

LONDON CHEMISTS ARE INVITED TO SEND
THEIR "SUNRAY" PATIENTS TO OUR PRIVATE
ROOMS. TRAINED STAFF IN ATTENDANCE.

Write for particulars

MERCOLIZED WAX

— : for the Complexion : —
and

STALLAX

— : a Shampoo : —

TWO substantial and well-advertised lines which show a handsome profit to the Retailer, and, moreover, may be stocked fearlessly owing to the Manufacturers' most liberal Sale or Return Guarantee.

Both are obtainable in two sizes, and their reputation and sterling value assure a steady turnover.

Order through your Wholesaler, or direct from:

DEARBORN (1923) LIMITED
37 GRAY'S INN ROAD, LONDON, W.C.1.
Telephone HOLBORN 9669

**"Just ask
your wife
to try a
BUTYW
SHAMP**

The Public are Calling for **PETAL DUST** "Wherein the subtle savour of the Flowers sublimely dwells." **THE GREAT FLORAL AIR PURIFIER**

THE GREAT FLORAL AIR PURIFIER

A Trial will convince you that—

ETAL DUST and its removal from contact lenses

PETAL DUST, which once shown, creates its own demand, and is therefore a valuable adjunct to every "go-ahead" store.

PETAL DUST, when displayed prominently upon your counter, will attract prudent customers by the fragrance of its unique odour, which to-day is of such universal admiration.

Retails in packets at 4d. and 8d. each.

Attractive Advertising matter free on request.

*Obtainable through all the usual Wholesale Houses or
from Sole Producers:—*

The Rosmarine Manufacturing Co.
LONDON, S.E.1.

COLOGNE for the BATH & TOILET



<i>Packed in two Styles</i>				
No. 5160				
4	8	16	32	oz.
9/6	14/-	25/6	45/6	doz.
<hr/>				



No. 5161				
10	20	40	oz.	
20/-	36/-	64/-	doz.	
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Manufactured by

WILLIAM TOOGOOD, LIMITED

77 SOUTHWARK STREET, LONDON, S.E.1

Showcards Supplied.

ARE YOU
STOCKING
THE NEW
EASY-OPENING
TIN

of
↓
Calvert's

CARBOLIC

Tooth Powder

F. C. CALVERT & CO. LTD., MANCHESTER



A
KEEN
BLADE
AT A
KEEN
PRICE

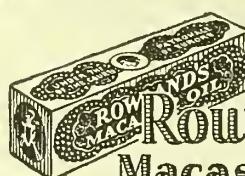
The Blade that SELLS as it SHAVES—
“LIKE GREASED LIGHTNING!”

Obtainable from all Leading Wholesalers.

Dept. C.D.
WANIE DISTRIBUTING CO.,
89 Aldgate High Street, E.C.3.

For thinning hair

Recommend Rowland's Macassar Oil, the
favourite of 137 years. It keeps the hair
healthy, and staves off greyness and
baldness.

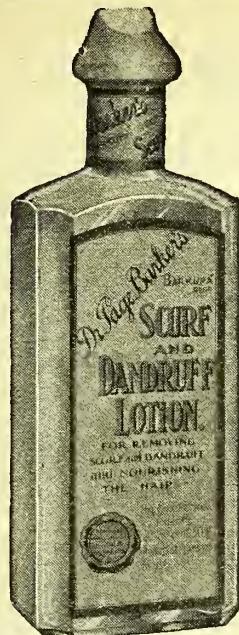


RETAIL
3/6, 7/- & 10/6
P.A.T.A.

Rowland's
Macassar Oil

Red for
dark hair
Golden
for fair or
grey hair

A. ROWLAND & SONS, Ltd., 112 Guilford St., London, W.C.1
RM2T



With every order for 3 dozen you get three 2/- bottles as bonus, handsome metal showstand, and attractive showcards.

Dr. Page-Barker's Scurf & LOTION Dandruff

The recognised specific for scurf

EVERY bottle of Dr. Page-Barker's Scurf Lotion bears a positive guarantee that it will eradicate scurf or the purchase price will be refunded. This makes it the easiest to sell of all hair and scalp specifics. And the profit is handsome.

PER 18/- DOZEN

SEE OUR NEW AND ARTISTIC SHOWCARDS

WRITE FOR EXPORT TERMS



P.A.T.A.

THOS. CHRISTY & CO., 4-12 OLD SWAN LANE, LONDON, E.C.4

HAIR BURMAN CLIPPERS

For SURGICAL
and VETERINARY
PURPOSES.

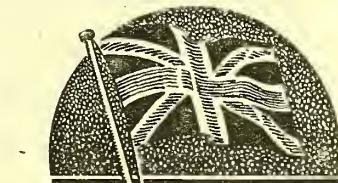
HAIRDRESSERS' CLIPPERS

BURMAN & Sons, Ltd., BIRMINGHAM

The British-Made Hair Clipper.



Dainty Shingling
Clippers for
Ladies' use.



odol

MOUTHWASH & TOOTHPASTE
IS
BRITISH MADE
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BRITISH LABOUR
FINANCED BY BRITISH CAPITAL

SUPPORT HOME INDUSTRIES BY
RECOMMENDING THESE EXCELLENT
PRODUCTS

CRANBUX LIMITED OF NORWICH

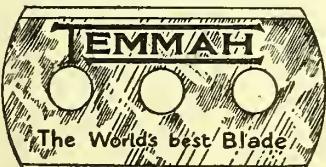
Aldwych

THE **EMMAH** BLADE

YIELDS 86% PROFIT

BONUS 2 DOZEN (and attractive Showcards) on 1 gross.

15/-
Gross
(14 doz.)



2d.
each
Retail.

Direct or
from all
Whole-
salers.

YOU WILL FIND THEY SELL ON MERIT ALONE.
EMMAH PRODUCTS LTD.
14/16 LOWER CLAPTON RD., LONDON, E.5

3 WONDERFUL BARGAIN PARCELS

Take advantage now of one of our three exceptional offers. We feel sure that you will agree with us that these lines are indeed bargains. Just fill in the coupon below stating parcel required, and we will send carriage paid to your door.

Parcel No. 1.

- 5 reams White Glazed Demy
16 lb. (17½ × 22½).
- 1,000 ¼ lb. size Greaseproof bags.
- 1,000 ½ lb. ditto ditto
- 1,000 ½ oz. Manilla Bags
- 1,000 1 oz. ditto ditto

For £2 0 0

Parcel No. 2.

- 5 reams Striped Wrapping
20 × 30 (assorted colours).
- 1,000 Plain Skillets (not wrapped), 2 oz.
- 1,000 ditto 4 oz.
- 1,000 ¼ lb. Greaseproof Bags
- 500 ½ lb. ditto

For £2 10 0

LESS 5% 1 MONTH.

Parcel No. 3.

- 5 reams (24×18) medium (23×18)
Bank Paper (13 lb.).
- 250 2 oz. Wrapped Skillets.
- 250 4 oz. ditto ditto
- 5 reams Brown Wrapping Paper
17 lb. (20×30)
- 1,000 ¼ lb. Greaseproof Bags
- 500 ½ lb. ditto ditto

For £3 10 0

SUTTLEY & SILVERLOCK, Ltd.

92 BLACKFRIARS ROAD, LONDON, S.E.1

The Chemists' Printers

'Phone : HOP 3473 (4 lines).

Please send me Parcel No. 1

" " 2 } Carriage Paid
" " 3 }

Name

Address

"ODENTIC" PLATE BRUSH
Regd. No. 417637.

From all Wholesalers.
Packed in ½-dozen Display Boxes.
Manufacturers:
W. R. Speer & Son (EST. 100 YEARS)
215 DALSTON LANE - - LONDON, E.8
Agent for S. Africa—C. GORDON DAVIES & CO.,
National Bank Buildings, Pritchard Street, Johannesburg.

BUY - USE & SELL
SHEFFIELD "AMO" STEEL BLADES
HAS GOOD AS REALLY GOOD BLADES CAN BE
EVERY BLADE GUARANTEED

AMO
SHEFFIELD STEEL
HAND FORGED
L. FRANKENBERG,
125 HOUNSDITCH,
LONDON, E.C.3.

Obtainable of all Wholesalers
WRITE NOW FOR FREE SAMPLE & Illus. Catalogue
Phone: Avenue 8846
Grams: "Uzecarnos, Ald., London."

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CUTLERY MANUFACTURERS,
Wheeldon Street, SHEFFIELD

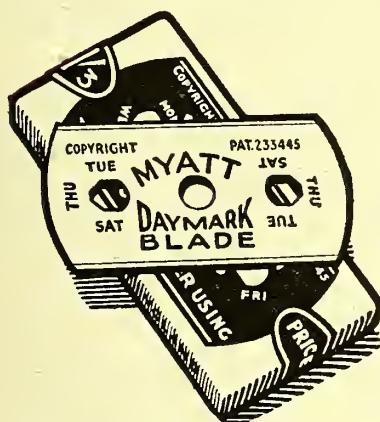
THE QUALITY BLADE BRITISH & BEST
RETAILS AT 2d. EACH.
In packets of Six 1/- (Wholesale 12/- per gross, carriage paid.)
Good Terms to Wholesalers.
From Wholesalers or direct from Manufacturers—
BRITISH RAZOR BLADE CO., LTD.
VICTORIA ROAD, ASTON, BIRMINGHAM

BRITON
RAZOR BLADE
SHEFFIELD STEEL
BRITISH MAKE
GILLETTE TYPE

IMPORTANT TRADE NEWS

WAR OFFICE CONTRACT

**ALL-BRITISH
MYATT BLADE**
 now awarded
ANNUAL CONTRACT
 for whole Army!



"In quality yet to be equalled."

Following up their success of 1928 when they received the first War Office Contract for Safety Razors and Blades ever entrusted to a British Firm, Myatt Daymark Blades have now been awarded the important

ANNUAL CONTRACT
 for the whole British Army.

The choice of the unique Daymark Blade for this important Contract confirms the preference of an ever-increasing number of the British Public.

Large advertisements in the press will tell the public immediately of this latest triumph of the Myatt Daymark Blade. Don't be caught in short supply; order Myatt Blades from your Wholesaler.

MYATT PATENT DAYMARK BLADES

For double-edge razors

1'3 less 33 $\frac{1}{3}$ % showing a profit of 50%
 FOR FIVE Sole Manufacturers :
 W. J. MYATT & CO., Ltd., Argent Works, Birmingham ON COST

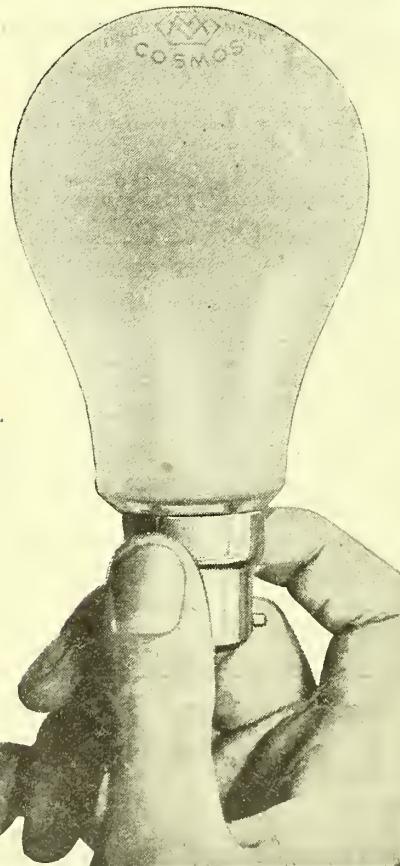
BRIGHTER BUSINESS at your finger tips

Your windows aglow with bright pleasant light never fail to draw prospective customers to your store.

Your goods, too, look so much better basking in the brilliance of Cosmos Pearl Lamps.

METRO-VICK SUPPLIES
(Prop.: Associated Electrical Industries, Ltd.)
METRO-VICK HOUSE
155 Charing Cross Road, London, W.C.2

COSMOS PEARL LAMPS



English Filter POSTLIP Papers

SQUARES
CIRCLES
FOLDED
ROLLS

WHITE
GREY
PLAIN
ANTIQUE
EMBOSSED
CRINKLED

SAMPLES
FREE,

Postlip Filterings are stocked by all the leading Wholesale Laboratory Dealers.



Evans, Adlard & Co Ltd
Postlip Mills, Winchcombe, Cheltenham.

NURSE HARVEY'S MIXTURE

A safe, simple and reliable remedy for Children's Ailments is advertised so extensively in the daily and weekly Press as to bring mothers to the retailer without effort on his part.

The selling has been done before the mother reaches the chemist, and, having supplied her, it is only common sense to claim she will buy other family necessaries from him. Moreover, the continuous demand for it produces a quick turnover.

For Direct Terms apply to—
OSCAR SCRUTON & CO., YORK



Distinctive
EUPAX
Cork Top Seals



Eupax Cork Top Seals give that "finishing touch" to bottles. You can have your own wording in any colour to the size of the illustrations, on best quality white chromo paper, at the following prices per 1,000

5,000, 5/7 10,000, 3/8 25,000, 2/7

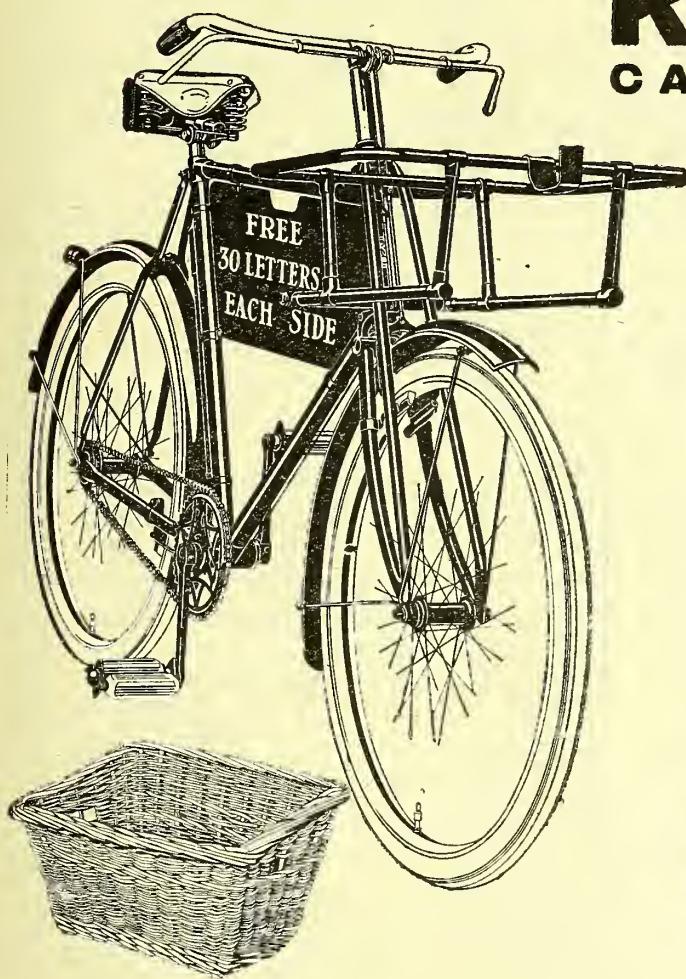
CHEAPER QUALITY CAN BE SUPPLIED IF REQUIRED

WILLIAM SESSIONS LTD.
Dept. C The Ebor Press, YORK

For bigger business

use a

RALEIGH
CARRIER CYCLE



SPECIFICATION

FRAMES. 22 in. and 24 in. Low Bottom Bracket.

NAME PLATE. As illustrated 30 letters each side free. A small extra charge for additional letters.

WHEELS. 26 in. \times 1 $\frac{1}{4}$ in.

TYRES. Dunlop Clipper Carrier.

GEAR. 66 in. free-wheel 6 $\frac{1}{2}$ in. cranks.

SADDLE. Brooks P 205.

PEDALS. 4 $\frac{1}{2}$ in. rubber, Heavy.

FORK. Specially strengthened with girder supports.

CARRIER. Tubular, built to frame, 18 in. \times 12 in. \times 14 in. Carrier can be supplied at extra charge of 3s. 6d. Flat platform carrier, 18 in. \times 12 in. complete with straps, but without basket, optional.

MUDGUARDS. Wide section with double detachable stays.

FITTINGS. Tools, toolbag and inflator complete.

REFLECTOR. Fitted to rear mudguards.

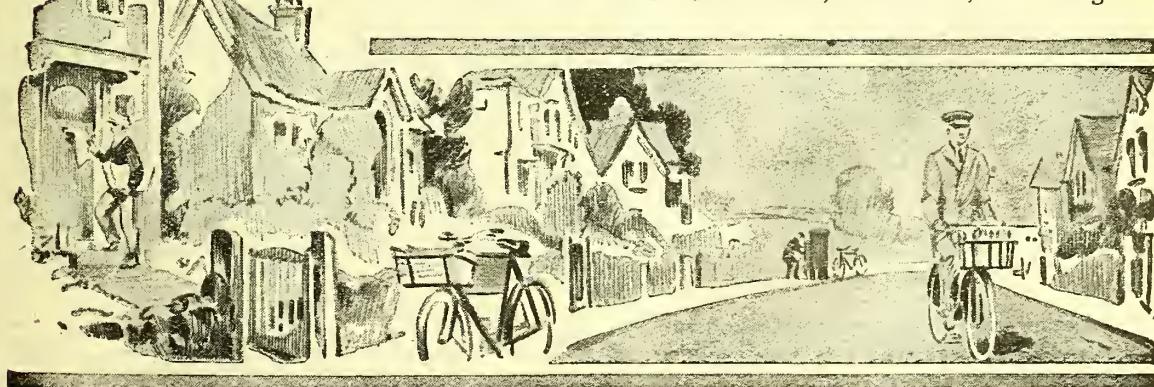
FINISH. Plain black "All-weather."

Complete with basket as illustrated, without lid or handle. Basket supplied with lid and handle at a small extra cost.

**£9 10s. cash or
by easy payments**

*Agents in every town and village.
Send for address of nearest.*

The RALEIGH CYCLE Co., Limited, Nottingham



PEARL MAZDA LAMPS
brighten business

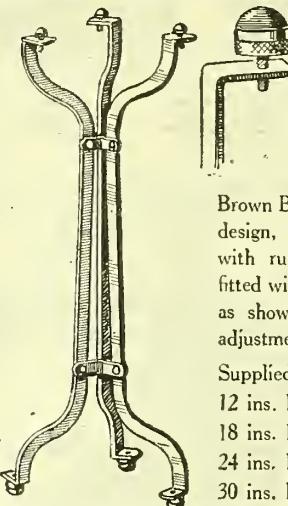
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MADE IN ENGLAND

3300

**THE BRITISH THOMSON-HOUSTON CO., LTD.
CROWN HOUSE, ALDWYCH, LONDON, W.C.2**

An Attractive Window Display



TRIPOD

No. SF/CD 2761
(Registered Design No.
746230).

Brown Bronze Stand, very elegant design, bottom limbs are fitted with rubber pads and tops are fitted with adjustable rubber pads as shown in illustration. This adjustment is a distinct advantage.

Supplied in the following sizes:
12 ins. high ... 4 9 each
18 ins. high ... 6 9 each
24 ins. high ... 8 9 each
30 ins. high ... 10 9 each

As used by the leading Chemists and Druggists.

Send for our full List No. CD 1115.

DUDLEY & COMPANY, Limited
451 Holloway Road, London, N.7.

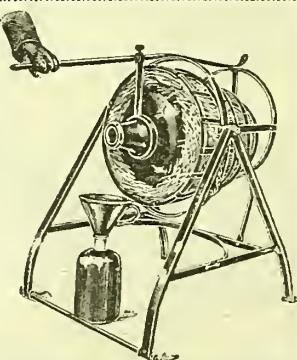
City Showrooms : 65, 66 FORE STREET, E.C.

CARBOY STAND AND TILTER.

For drawing off small quantities of acids, etc. from Carboys, with ease and safety.

The Carboy can be tipped to any position with one hand.

R. & H. LEIGH & SONS,
LIMITED.
Carboy Hamper Manufacturers,
BOLTON.



THE PREMIER CHEMISTS' SHOPIFITTERS

*Specialists in Design and Manufacture of
CHEMISTS' SHOPFRONTS & FITTINGS*

Established over half a century.

SHOW-CASES

For Immediate Dispatch

H. MILLS & SONS, LTD.
163-5 OLD ST., LONDON, E.C.1.

We have minimised production costs by equipping our Works with the most up-to-date machinery.

These Tubes are of the highest quality and finish combined with as low prices as any house in the Trade.



Samples and Quotations on request.

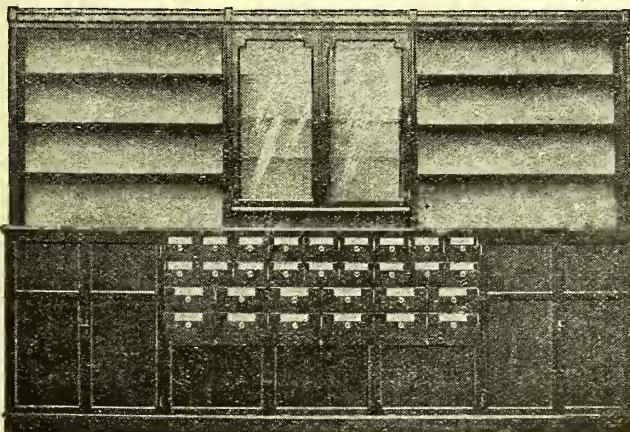
Best Service and Delivery.

ESTABLISHED 1857.

BETTS & CO. LTD.

1 WHARF ROAD, CITY ROAD,
LONDON, N.1.

NO TRADE DISTURBANCE
DURING ALTERATIONS—
AND A MUCH BETTER
SHOP IN CONSEQUENCE
WHY?



Write for our illustrated catalogue or 'phone Clerkenwell 0263.

**FARLEY'S
SHOPFITTERS
LIMITED**

Like this standard drug run, we make every fitting complete to your exact requirements before delivery.

It takes no time to fix a FARLEY fitting. Like magic your store is modernised or enlarged or any part of it altered.

And that precious NEWNESS LASTS! It must, for you cannot get better.

COMPLETE
INTERIORS from £70

18 HARE WALK, KINGSLAND RD., LONDON, N.1

REDUCED PRICE for POSTCARD ENLARGEMENTS

3 postcards from one negative for **1/-** retail
6 " " " " **1/6** "

Each enlargement is supplied in a folder mount.

FULL TRADE DISCOUNT OF 33 $\frac{1}{3}$ %

Counter Specimen FREE on request

SPECIAL ENLARGEMENT OFFER

**Two for the price of one.
Coloured or Black and White.**

If you have not taken up this Scheme, there is still time to do so. Please write for particulars and Showcard to :—

UNITED PHOTOGRAPHERS LTD.

72 Miles Street, Dingle
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**384 Chester Road
MANCHESTER**

**Crown Street
LEEDS**

"QUINPHOS"

THE GREAT TONIC



A NEW SCREEN AND A BIG BONUS.

This extremely attractive SCREEN in nine colours will be sent post free to every chemist who will apply for it.

Please send for Screen whether you order "QUINPHOS" or not. It makes one of the finest centre pieces you have ever had!

THE SPECIAL BONUS available until FEBRUARY 28th only, is as follows:—

6 x 1/3 size Liquid or Tablets FREE with a £2 0 0 parcel. This makes the PROFIT 36% on selling price or 56% on cost.

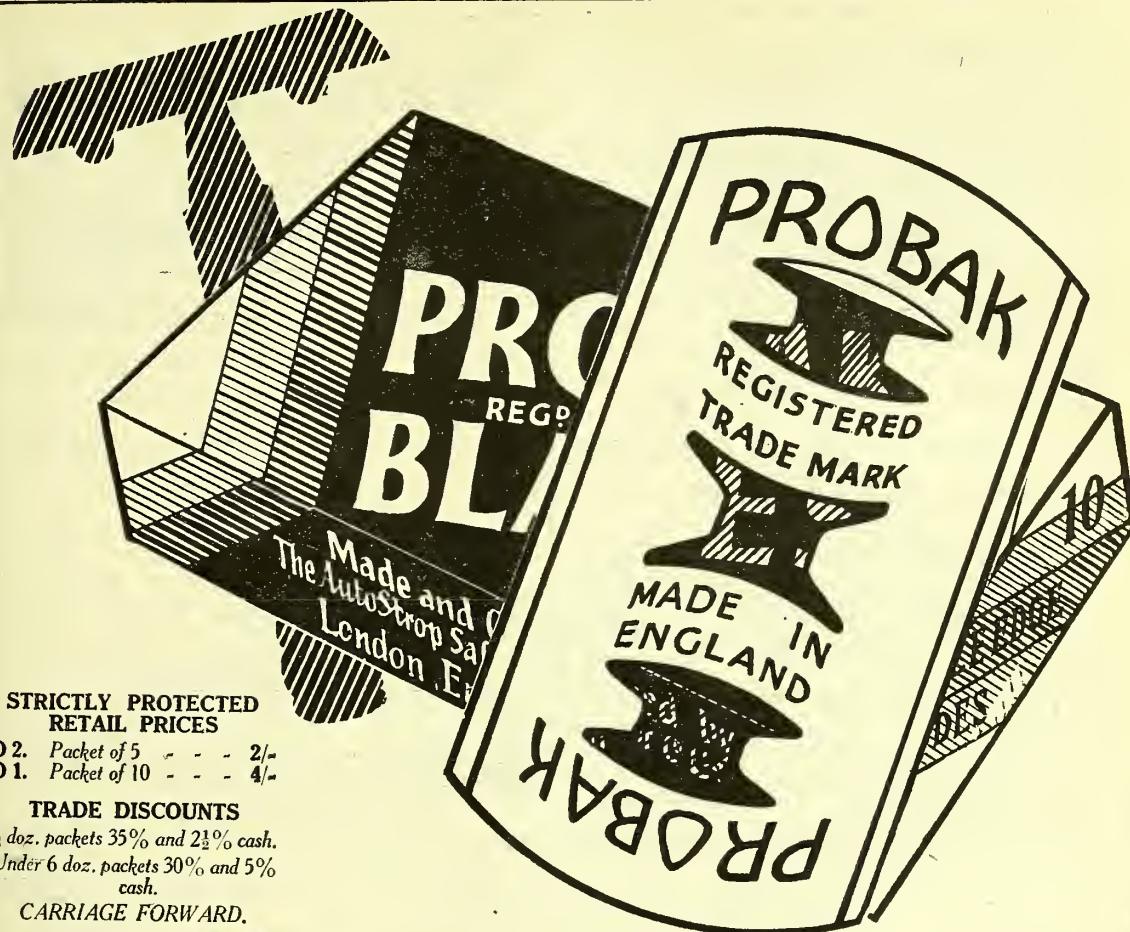
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Note : Having disposed of our retail businesses some time ago, please note that we are now *wholesale only*.



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Made from ribbon steel in giant machines which eliminate human error and ensure every blade being uniform in quality.

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Carriage paid in the United Kingdom.

18 4

The retail value of this parcel is £1 7s.

Messrs. Cleghorns, Pharmacists, Sutton, Surrey, say:—"Since giving prominence to your goods our sales have largely increased. Repeat orders are good."

BOB MARTIN Ltd. Dog Medicine Manufacturers since 1892 **SOUTHPORT**

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BECAUSE it enjoys the largest sale of any Cattle Medicine Preparation and is on the P.A.T.A.

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1 to 25, 1 to 50, 1 to 100 strengths
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In tins for 12½, 25, 50 and 100 gallons

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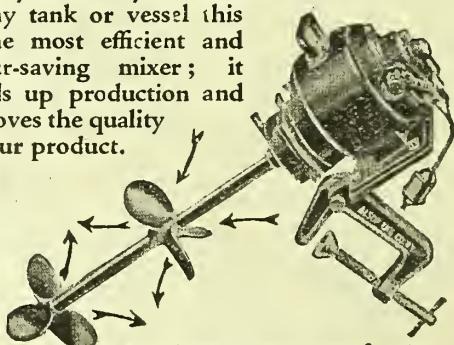
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to your
stocks*

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Nusalin ..	1/3½	11/3
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" ..	3/6	31/6

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Savory and Moore's Food	1/6	14/6
	2/11	28/-
" "	7/4	70/5

Fructole ..	3/-	29/-
" ..	5/-	48/-

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	3/-	30/-

Magnesia Cordial ..	1/3	12/-
" "	3/-	29/-

Dr. Jenner's Absorbent Lozenges	1/3	12/-
	3/-	29/-
	5/-	48/-

Neptunettes ..	3/-	27/-
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Contains high percentage of Vitamins A, B, and D.
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The New Chemical Food.
Contains Red Bone Marrow, Glycerophosphates and Assimilable Iron.
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FREE FROM NARCOTICS.

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THE CHEMIST AND DRUGGIST is in circulation and reputation the leading journal addressing the Chemical and Drug trades in the British Empire and other countries in the Old and New Worlds. It is the official organ of the Pharmaceutical Society of Ireland, the Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in the Overseas Dominions.

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Business Changes

MR. R. LIPKIN, chemist and druggist, has opened a pharmacy in India Buildings, Water Street, Liverpool.

L. ROWLAND & CO., LTD., chemists, have taken over the business of Mr. W. Topping, chemist and druggist, Trelawny Square, Flint.

THE business of the late Mr. H. A. Roper, Ph.C., Ebrington Street, Plymouth, has been acquired by MRS. E. W. RALPH, Trafalgar Hotel, Ebrington Street.

THE Liverpool branch of the British Thomson-Houston Co., Ltd., will be transferred from South Castle Street to 27-29 Stanley Street, as from February 10. Telephone: Bank 5700.

MR. R. F. TURNER, chemist and druggist, has acquired the business at Ferndown, Dorset, formerly carried on as a branch by Mr. W. P. Arnott, chemist and druggist, Poole.

English and Welsh News

The Editor will be obliged if subscribers will send him marked copies of newspapers containing items of interest for insertion in this or other news sections.

Safeguarding of Industries Act, 1921

Representations have been made to the Board of Trade under Section 10 (5) of the Finance Act, 1926, regarding the exemption of adipic acid and oxyethyl para oxyphenyl benzylamine methyl sulphate under the Safeguarding of Industries Act, 1921. Any communication should be addressed to the Principal Assistant Secretary, Industries and Manufactures Department, Board of Trade, Great George Street, S.W.1, within one month from February 12.

Wellcome Historical Medical Museum

A small exhibition of books and pictures associated with Galen has been arranged at the Wellcome Historical Medical Museum, Wigmore Street, London, W.1, in connection with the eighteen hundredth anniversary of his birth, which is variously given as 130 A.D. or 131 A.D. Most interesting, perhaps, among the early editions of the books are two of the "Methodus Medendi," printed respectively in Venice in 1500 and in Paris in 1519, the editor of the latter being Linacre. As we pointed out in our Special Issue of June 25, 1927 (p. 806), Galen's "Methodus Medendi vel de Morbis Curandis" is of perennial attraction for pharmacists by reason of its containing the original formula for cold cream. In these days of skilled excavation on an unprecedented scale it is not impossible that a sample of ceratum Galeni, prepared by the "author," may come to light: if this should happen, the Wellcome Museum ought to receive the first offer. Among the paintings and drawing is a curious colour print, dated 1774, showing Galen meditating over a human skeleton which is lying on the ground—an incident said to have led to his conversion to Christianity.

Photographic Dealers' Association

A Bradford and District Branch was established on February 4. Mr. A. T. Bailes, past-president and former secretary of Bradford Pharmaceutical Association, was the convener of the meeting, and the membership is chiefly among chemists. The following were elected to office: Chairman, Mr. T. C. Bridges; Vice-Chairman, Mr. A. T. Bailes; Treasurer, Mr. Hirst; Secretary, Mr. F. C. Wilson (secretary of the Bradford Branch of the Pharmaceutical Society); Assistant Secretary, Mr. Kirby; Committee, Messrs. A. Croasdale, J. A. Thorpe, J. A. White, W. Sutcliffe, — Lodge, — Craven, Stanford Taylor and — Tillett.

The annual meeting of the Bournemouth Branch was held on January 31. Mr. A. Finnis Attwell, chemist and druggist, presiding over a large attendance of members, including Mr. George W. Pascall, president of the Bournemouth Chamber of Trade. The secretary (Mr. M. S. Plomer) submitted a brief résumé of the year's work. This was unanimously adopted. The election of officers resulted as follows: Chairman, Mr. A. Finnis Attwell; Vice-Chairman, Mr. J. Thomas; Treasurer, Mr. H. Vaughan Perry; Emergency Committee, Messrs. F. E. Beeson, D. D. Buchan, A. E. Robinson, N. K. Phillips, C. D. Venning, V. J. Scampton. A discussion took place with reference to area committees, and there was a further discussion arising from a report given by the chairman in relation to suggested reforms for consideration of the P.D.A. Council. It was felt that the function of the P.D.A. should not be merely political.

Wine Licence Applications

Among the applications for wine off-licences at the recent local Brewster Sessions, those on behalf of the following chemists (or drug departments) have been granted, subject in most cases to the sales being restricted to medicated wines: Mr. B. B. Hargreaves, Chorley; Mr. G. Hill, Coventry; Mr. E. P. Northover, Northampton; Mr. G. R. Williamson, Coventry; Mr. V. J. Woolls, Margate.

The applications of the following have been refused : Derby Co-operative Society, Ltd.; Cleckheaton Co-operative Society, Ltd.; John R. Randall & Co., Ltd., Cippenham, Slough; Timothy Whites (1928), Ltd., Hastings.

At Port Talbot, on February 6, the magistrates adjourned the applications for renewal of licences by Mr. T. B. Bamford, chemist and druggist, and Mr. D. I. Rees, chemist and druggist. It is stated that this action arose from a report by the police superintendent to the effect that at the request of certain magistrates he spoke to the chemists regarding the elaborate window displays which they made of Christmas wines, and asked them to reduce these displays. All the chemists complied with this request excepting Mr. Bamford and Mr. Rees.

Inquests

While being taken to prison under a County Court committal order on February 10, Joseph Harrison, warehouseman in the employ of Raines & Co., manufacturing chemists, York, drank the contents of a bottle of hydrocyanic acid on the platform of York railway station and died almost immediately. The coroner recorded an open verdict at the inquest.

An inquiry was held by the Hampshire coroner, on February 6, concerning the death of Miss Violet M. Lund, who died while staying with a relative at Hayling Island. Evidence was given to the effect that the deceased took all the contents of a bottle of tonic syrup; a doctor was sent for, but while he was fetching chloroform from his surgery Miss Lund died. Evidence of purchase was given by Mr. C. M. Blaik, chemist and druggist, and a medical witness stated that the cause of death was strichnine poisoning. A "Misadventure" verdict was recorded.

An inquest was held, on February 11, on the body of Dr. F. W. Arnall, head of the Department of Pure and Applied Chemistry at Cardiff Technical College. Evidence was given by Mr. J. M. Davies, Ph.C., to the effect that on February 7, in the course of experiments with methyl iodide, silver oxide and dimethyl tartrate, a glass tube exploded; Dr. Arnall was at once taken to hospital, but died three hours later. A medical witness from the Cardiff Royal Infirmary stated that bandages were properly applied prior to Dr. Arnall's admission. The coroner, in summing up, said that this was another instance of a young life being given in the cause of science. A verdict was given stating that death was due to shock following injuries.

Contracts

The following tenders have been accepted by the bodies named :—

Birmingham Guardians.—The University Drug Co., Ltd., Bournbrook, operating table for Selly Oak Hospital.

India Office.—Southall Brothers and Barclay, Ltd., white absorbent lint.

Cardiff

The "Western Mail" and the "South Wales Echo" of February 8 devote considerable space to the details of a fatal accident which occurred on the previous day at the Cardiff Technical College. It appears that while Dr. Francis Arnall, head of the Department of Pure and Applied Chemistry, was conducting an experiment, a glass tube exploded with such force that he died shortly after admission to hospital. Of the other occupants of the laboratory, three received injuries in varying degrees. (See also "Inquests" and "Personalities.")

At a meeting of the Cardiff Rural District Council, on February 5, it was stated that local chemists were complaining of the unfair competition which they had to meet through the reduced prices at which patent foods were supplied at the municipal clinics. Mr. Warren Evans said the goods were provided at cost price at the clinics, and as a result retail chemists, who were ratepayers and helped to maintain such clinics, had to suffer. He did not want to deprive poor people of the advantages which they were now getting. He contended, however, that the ratepayers who called the tune should pay the piper.

Liverpool

Mr. W. H. Saunders, F.C.S., chairman of Ayrton, Saunders & Co., Ltd., has returned from the West Indies.

Mr. J. G. Wallbridge, ex-president of the Liverpool Chemists' Association, has been re-elected vice-chairman of St. Barnabas Parochial Church Council for a third year.

At Liverpool Assizes, on February 3, compensation for the death of her husband, Mr. John H. Halliwell, wholesale chemist, Cook Street, Liverpool (*C. & D.*, 1929, II, 584), was unsuccessfully sought by Mrs. Halliwell on her own behalf and that of her son. The defendant was George Gilbert Venables, Victoria Park Hotel, Barrow-in-Furness. Mr. Justice Swift ruled that the plaintiff had not made out a case to go to the jury, and gave judgment for the defendant, with costs.

Manchester and Salford

At Salford Police Court, on February 10, Henry Swift (51) was sentenced to six months' imprisonment for stealing from a doctor's motor-car a bag containing scheduled poisons and antidiphtheritic serum.

The employees of Robert Gibson & Sons, Ltd., and friends to the number of about 180 held their annual dance and social evening at the Hulme Town Hall on February 1. The event was a great success.

Sheffield

Mr. R. J. Butcher, chemist and druggist, Rawmarsh Hill, Rotherham, and Mr. S. A. Webster, Ph.C., Parkgate, Rotherham, have been elected members of the Committee of the local chamber of trade.

A customer in a local pharmacy flatly refused to pay 1s. 3d. for a proprietary article, previously sold stamped but now sold unstamped. He tendered 1s., and pointed out that on the one he had previously purchased it distinctly stated upon the stamp that the value was not over 1s., and he had always understood the extra 3d. was for the stamp. Further, if the value without the stamp was really 1s. 3d., why had it not had a 6d. stamp instead of a 3d., the wording on a 6d. stamp being "Price over 1s. and under 2s. 6d."?

Miscellaneous

Poison-Licence Application.—Mr. F. J. Beck, Great Torrington, has applied to the Devon County Council for a licence to sell agricultural and horticultural poisons.

Royal Society of Arts.—Particulars of the seventh annual open competition of industrial designs to be held at the Imperial Institute, South Kensington, London, S.W., in June, have been issued, and can be obtained from the secretary of the Royal Society of Arts, John Street, Adelphi, London, W.C.2.

In the Courts.—At Staple Hill, on February 6, Henry Hodder & Co., Ltd., chemists, were fined £15, with costs, for having sold at one of their branches camphorated oil deficient in camphor to the extent of 12.5 per cent.—In Lambeth County Court, London, on February 7, P. H. Galloway, Ltd., manufacturing chemists, Walworth Road, S.E., obtained judgment in the sum of £11, with costs, against Mr. and Mrs. W. D. Noble, Warwick Road, Thorpe Bay, in respect of goods sold and delivered. There was no appearance on behalf of the defendants.

Fires.—The following outbreaks of fire have been recorded since our last report :—The premises of Barnes & Crompton, Ltd., manufacturing chemists, Ribble Mills, Preston, were severely damaged by an outbreak of fire on February 8. The roof and top floor were destroyed. The "Lancashire Daily Post" of February 8 prints an interview with the joint managing director, Mr. F. Chaloner, chemist and druggist, and an illustration of the wrecked top story.—There was an outbreak recently at the premises of George Duncan, Ltd., chemists, Dewsbury. The damage was not of an extensive nature.

Irish News

Brevities

Murtagh's Medical Hall, Arva, has been acquired by Mr. William Kelly, L.P.S.I., late of the Medical Hall, Kildysart, co. Clare.

During the nine months ended September 30, 1929, 4,468 cwt. of glycerin, valued at £7,585, was exported to Great Britain from the Irish Free State, compared with only 1,340 cwt., valued at £3,140, in the corresponding period of 1928.

When the doctors of several dispensaries under the Newry Board of Guardians were asked by the Local Government Board why they had not reduced supplies of medicines, etc., during the half-year ended September 30, they gave the reason that the population had decreased in various districts, and the rural population could get to the towns for medicines. The Board approved of the explanation.

Belfast

At Belfast Police Court, on February 7, Charles Gilmour, alias Crompton, described as a Free State ex-soldier, was remanded on a charge of breaking into the pharmacy of Mr. Samuel L. Cleland, Ph.C., 247 Duncairn Gardens.

At the Belfast Police Summons Court, on February 4, fines of 2s. 6d. each were imposed on the following for failing to comply with the Early Closing Order:—Irwin's Pharmacy, Ltd., Great Victoria Street; Mr. Alfred W. Stevenson, Ph.C., Dublin Road; Mr. Abraham J. Myers, Ph.C., Antrim Road. For a similar offence Mr. Robert Andrew, Ph.C., and Mr. John Kennedy, Crumlin Road, were each fined 5s.

Scottish News

Brevities

The premises at 46 Albert Street, Dundee, occupied by Mr. Craig, chemist, were recently raided by burglars, who obtained entrance by a back window. A sum of money and a quantity of goods was stolen.

The members of Dalry Burns Club met on January 24 and held the 105th meeting in the same place, the Court-hill Inn. The chair was occupied by the president, Mr. Charles Pickles, chemist and druggist, who gave "The Immortal Memory of Robert Burns."

The annual staff dance of the firm of George Lunan, manufacturing chemists, 20 Queensferry Street, took place in MacVitties Rooms on February 6. Some sixty were present, and a very enjoyable evening was spent. The guests were received by Mr. and Mrs. Lunan.

At the annual supper and ball of Oban Lodge Commercial, No. 180, Bro. Samuel Lawrence, who has been an active member for the past forty-four years, having filled various offices, including that of R.W.M., for seven years, was presented by the brethren with a handsome chiming clock with appropriate inscription thereon, while Mrs. Lawrence received a Celtic brooch.

Mr. James Bryson, J.P., general manager of Scottish Oils, Ltd., died on January 19 at Ballingeich, Mid-Calder. Mr. Bryson was a native of Coatbridge, where he was born seventy-six years ago, and on the amalgamation of the Scottish Shale Oil Co. and the Pumperston Oil Co., under the name of the Scottish Oils, Ltd., he was appointed general manager, and latterly a director.

Inverness chemists' staffs held a dance in the Station Hotel on February 7. Fifty couples were present, and Miss Miller's orchestra provided the dance music. Messrs. H. Walker and J. Macrae were M.C.s, and the catering was excellently carried out by the staff of the Station Hotel. The arrangements for the dance were in the hands of Miss Frances Campbell and Miss Jauet Thomson, to whom the success of the entertainment was greatly due. The proceeds will go to the Northern Infirmary Reconstruction Fund.

Sporting Events

The annual meeting of the Manchester and Salford Pharmaceutical Tennis Club was held on January 29, Mr. Barker, chairman of the Junior Section, occupied the chair. The treasurer's report showed a balance of £8, and was adopted. The secretary, in his report, stated that there had been a very serious falling away amongst the members during the past season and he appealed to all to rally together and make the season of 1930 an outstanding success. He said that for a branch with a membership in the neighbourhood of 500 to have a tennis club with only 28 members was a disgrace and was not very encouraging to those who tried hard to bring success and enjoyment into the social life of the local pharmacist and his assistants. The courts are pleasantly situated at "Chomlea," Claremont Road, Pendleton, and within easy reach of town by bus. A vote of thanks was passed to Mr. J. H. Franklin, the retiring president, for his staunch support and generosity to the club during past seasons. The following were re-elected officers for 1930: *Secretary*, Mr. R. B. Maskell; *Treasurer*, Mr. W. Edwards. It was decided to carry out the same programme as last season. The club will provide tennis balls for use during the season. The opening date is fixed for April 27, 1930, at 2 p.m., when the courts will be open to all visitors who care to come along; there will be an American tournament during the afternoon. Any further particulars will be gladly furnished by the secretary, Mr. R. B. Maskell, 3 Howard Avenue, Gordon Road, Monton, Eccles.

Coming Events

This section is reserved for advance notices of meetings or other events. These should be received by Wednesday of the week before the meetings, etc., occur.

Monday, February 17

British Industries Fair, 1930, Olympia, London, W.14, at 10 a.m. (and until February 28).

Pharmaceutical Society of Great Britain, Ipswich and Suffolk Branch, Masonic Hall, Ipswich. Bridge drive and dance, 8 p.m. till midnight. Tickets 3s. each, including refreshments.

Tuesday, February 18

North London Pharmaceutical Association, North Library, Manor Gardens, Holloway Road, N. Meeting at 8.30 p.m.

Royal Institution, 21 Albemarle Street, W.1, at 5.15 p.m. Sir William Bragg, F.R.S., on "X-Ray Determination of the Structure of Cellulose."

Wednesday, February 19

Aberdeen Pharmaceutical Association, Douglas Hotel, Aberdeen, at 7.15 p.m. Annual whist drive and dance. Tickets, 6s. 6d. each, from Mr. J. Mutch, 90 King Street.

Birmingham Pharmaceutical Association, Imperial Hotel, Temple Street. Annual dance, 8 p.m. to 1 a.m. Tickets 4s. 6d. each, including refreshments.

Ealing and District Pharmacists' Association and Branch of the Pharmaceutical Society, Restaurant Frascati, Oxford Street, W.1. Annual dinner and dance. Reception at 6.30 p.m., dinner 7 p.m.; dancing 9.30 p.m. until 11.45 p.m. Tickets 12s. 6d. each. Evening dress.

Guild of Public Pharmacists, 17 Bloomsbury Square, W.C.1. Meeting at 7.30 p.m. Dr. H. F. Brewer, M.A. (Cantab.), on "The Use of Liver and Liver Extracts."

Liverpool Chemists' Association, Royal Institution, Colquitt Street, at 8 p.m. Mr. W. J. Beardsley, member of Council, on "Pharmaceutical Prospects."

Pharmaceutical Society of Great Britain, Bath and District Branch, The Red House, New Bond Street, Bath, at 8 p.m. Address by Mr. John Keall, member of Council.

Pharmaceutical Society of Great Britain, North British Branch, Edinburgh, at 8 p.m. (1) E. J. Schorn, Ph.C., A.I.C., on "Quinoline Hydrogen Peroxide Reagent: A Distinguishing Colour Test for Aloes"; (2) D. B. Dott, Ph.C., F.I.C., F.R.S.E., on laboratory notes on (a) "The Official Tests for Resins of Jalap, Podophyllum, and Scammony," and (b) "Acetylsalicylic Acid in Solution with Potassium Citrate"; (3) Gordon Perrins, Ph.C., on "Quinine Urethane Injections."

Thursday, February 20

Birkenhead and Wirral Pharmacists' Association and Branch of the Pharmaceutical Society, St. Peter's Hall, Rock Ferry. Fancy dress carnival dance. Tickets, 5s. 6d. each, from G. L. Hale, 8 Hoylake Row, Birkenhead.

Legal Reports

False Customs Declaration.—At the Mansion House Justice Room, London, on February 4, Douglas Kendal, Upper Tulse Hill, was summoned for having made a false Customs declaration by representing that W. J. & F. H. Bull, Ltd., had purchased outright nine cases of thorium nitrate from Deutsche Gasglühlicht Auer for £256 2s. 8d., whereas Messrs. Bull did not buy the chemical outright, nor was the price declared the true price. Mr. A. P. Davis appeared for the Customs and Excise. Mr. C. J. R. Llewellyn, for the defendant, said the worst which could be imputed to his client was that he had signed the declaration without sufficient inquiry as to its accuracy. A fine of £20, with £3 3s. costs, was imposed.

Dangerous Drugs Acts.—At Liverpool Police Court, on February 6, Mr. John W. Black, chemist's assistant, was summoned for being in unauthorised possession of a "dangerous" drug. Norman's Pharmacies, Ltd., his employers, summoned for aiding and abetting, pleaded "Guilty." Mr. A. Priestley, prosecuting, said that on December 3 a detective-inspector visited the shop in Park Road which belonged to Norman's Pharmacies, Ltd. Mr. Black said he was not a registered chemist, but that Mr. Norman called at the shop every evening. He then produced the key of the poisons cupboard, in which the inspector found morphine hydrochloride. At the same court, Mr. Harold Franey pleaded "Guilty" to being in unauthorised possession of morphine hydrochloride, at a shop in Kensington owned by Norman's Pharmacies, Ltd. Mr. Edwin Arthur Capper, chemist and druggist, the manager of the shop, pleaded "Guilty" to aiding and abetting. The two assistants were bound over. Norman's Pharmacies, Ltd., were fined £10, and Mr. Capper £3.

Arrears of Table-Waters Duty.—At Belfast Police Court, on January 22, William Hunter, Inspector of Customs and Excise, prosecuted Mr. William Watterson, trading as W. J. Briggs, 23-27 Pine Street, for having failed to furnish a true return of dutiable table waters in the months of June, July and August 1929, in breach of the regulations made under Section 6 of the Finance (New Duties) Act, 1916. In a further summons the defendant was charged with removing dutiable table waters for home consumption without entering them in a book required to be kept for the purpose. Mr. Mussen, for the prosecution, explained that the Act under which the prosecutions were brought provided that there should be a duty of 8d. per gallon on all unsweetened table waters. The waters concerned in the charges were supplied to Belfast Union and other places. In June last the defendant returned sales of 31 $\frac{1}{2}$ gallons instead of 240 $\frac{1}{2}$ gallons, in July 27 $\frac{1}{2}$ gallons instead of 231 $\frac{1}{2}$ gallons, and in August 34 $\frac{1}{2}$ gallons instead of 292 gallons. That sort of thing had been going on since 1928, and the defendant was liable to a fine of £50 for each offence. In a letter to the Revenue authorities, Mr. Watterson accepted full responsibility, and said he had to leave the work in other hands. Mr. Fox, for the defence, said he had to plead "Guilty," but he must make it quite clear that there was no criminal intent. The defendant was prepared to pay £151 10s. arrears of duty. Mr. Mussen consented to a fortnight's adjournment, and the case was adjourned accordingly.—At the adjourned hearing on February 5, it was announced that the arrears had been paid. The magistrate imposed a penalty of £50, reducing it to one of £12 10s., and marked the other summonses "withdrawn."

Gazette Bankruptcy Acts

RECEIVING ORDER

HARKNESS, J. M., 408 Stapleton Road, Bristol, chemist.

RECEIVING ORDER AND ADJUDICATION

QUIN, R. H., 81 Charlotte Street, Blackburn, and late of 430 Talbot Road, Blackpool, chemist and druggist.

Westminster Wisdom

Notes on Parliamentary Matters

DECIMAL SYSTEM

The President of the Board of Trade (Mr. W. Graham) informed Mr. Freeman, on February 11, that no proposals were in contemplation to establish a decimal system of weights and measures in this country, which is already legal for most purposes.

CHEMICAL INDUSTRY

Replying to a question put by Mr. Kelly on February 10, the Minister of Labour (Miss Bondfield) stated that in July 1928 the estimated number of insured workpeople, aged 16-64, classified as belonging to the chemical industry in Great Britain was 99,750, of whom 77,450 were males and 22,300 were females. The corresponding total for July 1929 was 105,340, of whom 81,140 were males and 23,930 were females. The number of such persons recorded as unemployed at December 16, 1929, was 7,188, of whom 6,377 were males and 811 females.

SENIOR NAVAL PHARMACISTS

Sir J. Davidson asked the First Lord of the Admiralty, on February 11, whether the conditions under which senior naval pharmacists signed their original agreements, entitling them to first-class sea passages, will be restored; and whether the instructions contained in Admiralty Fleet Orders, dated November 1, 1929, will be rescinded in this respect?

Mr. Ammon: The present arrangement has been in force for over twenty years. The question of re-grouping senior pharmacists under the rules relating to sea passages for civilian officers has been under review on several occasions in recent years, but it is not proposed to make any change in the present arrangement.

New Companies and Company News

P.C. means Private Company and R.O. Registered Office.

METCALFE & CO. (LIVERPOOL), LTD. (P.C.).—Capital £250. Objects: To carry on the business of chemists, druggists, drysalters, etc. The directors are: G. E. Metcalfe and B. W. Metcalfe. R.O.: 104 Derby Lane, Stoneycroft, Liverpool.

A. E. FARROW & SONS, LTD. (P.C.).—Capital £1,000. Objects: To acquire the business of a chemist, druggist and dealer in photographic materials carried on by A. E. Farrow at 43 High Street, Old Brompton. The permanent directors are A. E. Farrow and Mrs. I. B. M. Farrow. Solicitors: Booth Hearn & Stratton, Chatham.

RICKS, LTD. (P.C.).—Capital £600. Objects: To carry on the business of chemists, druggists, drysalters, oil and colourmen, manufacturers of and dealers in pharmaceutical and other preparations and articles, etc. The first directors are: T. T. Richards and S. E. Chatfield. Solicitors: Eager & Son, Horsham.

TATLER'S (CHEMISTS), LTD. (P.C.).—Capital £500. Objects: To acquire the business of a chemist now carried on by the exec. of the will of the late A. E. Tatler at 179 Borough Road, Seacombe, Ches., as "Albert E. Tatler, M.P.S." The directors are: A. Durrant, M.P.S., Mrs. Louisa M. Tatler and N. Tatler. R.O.: 179 Borough Road, Seacombe, Wallasey, Ches.

ACTINA CO. (INHALERS), LTD. (P.C.).—Capital £250. Objects: To acquire the business of a manufacturer of pharmaceutical commodities, chemist, druggist and merchant of chemical products now carried on by L. Rowe, at 40 Summer Row, Birmingham, to acquire, use, advertise, let out on licence or otherwise turn to account the registered trade mark "Actina," No. 490,600, Class 3, in respect of medicated inhalers for human use, etc. The directors are: L. Rowe and A. Howle. Solicitors: Fcdfern & Co., Birmingham.

TIMOTHY WHITES (1928), LTD.—At the extraordinary meeting of holders of $7\frac{1}{2}$ per cent. cumulative preferred ordinary shares in Timothy Whites (1928), on January 11, it was announced that the new preferred ordinary shares will be issued at 20s. 6d. and the deferred shares at 2s. Any portion of the proposed capital not applied for by the shareholders will be taken by the directors and their friends.

YEAST-VITE, LTD., report a net profit for the year 1929, after deduction of income-tax, of £58,026, compared with £55,495 in the preceding period of fifty weeks. The directors propose to pay 11 per cent. on the Participating Preferred Ordinary shares (compared with 9 $\frac{1}{2}$ per cent.) and 15 per cent. on the Deferred shares (against $7\frac{1}{2}$ per cent.). They further propose to place £14,600 (against £20,000) to reserve against preliminary expenses and to carry forward £20,518, against £10,691 brought in. With this year's allocation the reserve against preliminary expenses equals the original amount of £34,600 standing in last year's balance-sheet.

BORAX CONSOLIDATED LTD.—The directors announce that they are unable to recommend the payment of a dividend on the deferred ordinary shares for the year ended September 30, 1929. For the two preceding years $7\frac{1}{2}$ per cent. per annum was paid on the £1,150,000 of deferred ordinary capital, and distributions, ranging from 15 per cent. downwards, have been made since 1919. In passing the usual interim dividend in October last the directors stated that the very severe competition had led to further serious reductions in the prices of borax and boric acid, and the figures then available showed that a dividend on the deferred capital had not been earned.

Voluntary Liquidation

Fletcher's Pharmacy, Ltd., Leeds.—The statutory meeting of the creditors was held on February 7 at the offices of F. & C. S. Holliday, I.A., Pearl Chambers, East Parade, Leeds. Mr. M. Fletcher, the managing director of the company, occupied the chair. The statement of affairs showed ranking liabilities of £5,700 15s. 10d., of which £3,075 1s. 7d. was due to the trade and £2,625 14s. 3d. to the bank. The assets comprised fixtures and fittings, £543 19s. 10d., estimated to realise £150; stock, £3,040 14s. 7d., expected to produce £1,520 7s. 4d.; cash in hand, £22 19s. 8d.; and book debts (good), £13; making a total of £1,706 7s. After allowing £81 5s. for preferential claims, the net assets were £1,625 2s., or a deficiency so far as the creditors were concerned, of £4,075 13s. 10d. The issued capital was £101, and as regarded the shareholders, there was a deficiency of £4,176 13s. 10d. The company was registered in September 1921, with a nominal capital of £500, of which £101 had been issued for cash and was fully paid. The only shareholders were Mr. M. Fletcher and his wife. Proper books had been kept and regularly audited. In 1927 the turnover was £6,551, with a gross profit of £1,403. In the following year the sales increased to £8,229, with a gross profit of £1,423, whilst last year the turnover was £9,337, with a gross profit of £1,335. The profits had not been higher, owing to the fact that in the earlier years the company commenced to sell as a wholesaler to other chemists. Apparently the company sold at the same price as they purchased goods, but had the advantage of the discount. A branch shop was opened some time ago, which it was thought could be sold as a going concern. The creditors decided to confirm the voluntary liquidation of the company, with Mr. F. Holliday as liquidator. The following are creditors:—Bankers, £2,625; Goodall, Backhouse & Co., £871; Fassett & Johnson, Ltd., £142; Carr & Sanderson, £175; Levin, B., £300; Ziff, E., £183; Fletcher, M., £87; Allen & Hanburys, Ltd., £45; The British Drug Houses, Ltd., £50; Christy, T., & Co., £42; Potter & Clarke, Ltd., £46; Sangars, Ltd., £47; Gambles, J. C., & Co., Ltd., £34; Griffiths-Hughes, E., Ltd., £40; Kolyos, Inc., £31; Holliday, F. & C. S., £33; Cranbux, Ltd., £37.

EXPERIMENTAL plantings of the soya bean are being made near Mazagan, Morocco.

Insurance Act Dispensing

Record of matters concerning Chemists' interests in the National Health Insurance Acts

Local Reports

ENGLAND AND WALES

Essex.—A meeting of the Essex Insurance Committee was held recently. The Finance Subcommittee reported that the balance in hand on December 31 was £5,497 9s. It was recommended that the sum of £325 18s. be allotted to the Pharmaceutical Committee for the year 1929, and, subject to the consent of the Ministry of Health, £330 for expenses for the current year. The recommendations were adopted. The number of prescriptions priced during the year was 1,394,719, and the amount to be paid by the Committee was £1,098 18s. 4d. The estimated expenditure in this direction for the current year was £1,216. The following statistics were submitted:—

Year	No. of persons	No. of prescriptions	Cost of prescriptions	Average cost per person
1927 ..	272,448	262,576	9,594 15 0	8.45d.
1928 ..	287,813	264,696	9,511 0 3	7.93d.
1929 ..	309,911	274,309	9,713 5 3	7.52d.

Isle of Wight.—At a meeting of the Isle of Wight Insurance Committee, held on January 17, the Finance Committee reported having received a communication from the secretary of the Panel Committee and also a letter from the secretary of the Isle of Wight Branch of the Pharmaceutical Society stating that they had adopted, with a few exceptions, the National Health Insurance Formulary. In the course of discussion it was asked if that meant that the ingredients included in the exceptions would not be prescribed. The chairman said that if doctors prescribed them for a patient the chemist was bound to supply them, notwithstanding the agreement.

London.—A meeting of the London Pharmaceutical Committee took place on January 21, Mr. A. H. Jenkin in the chair. The vice-chairman referred to the chairman's recent bereavement and moved a resolution of sympathy and condolence, which was passed in silence, all members standing. The secretary reported *inter alia*: Particulars of the position relating to unstamped proprietaries and certain sterilised solutions. That arrangements had been completed for the continuance of the special dispensing service provided in South London. Comparative figures for the months of October 1928 and 1929 are:—Number of prescriptions, 773,444 and 726,805; cost of ingredients, £11,501 17s. 11d. and £9,981 7s. 6d.; dispensing fees, £14,320 3s. 4d. and £13,242 13s. 6d.; average cost of ingredients, 3.57d. and 3.30d.; average of dispensing fees, 4.44d. and 4.37d.; number of persons on list, 1,827,086 and 1,843,068. That the number of persons supplying drugs and appliances on December 31, 1929, was as follows:—Chemist contractors in general business, 839; in institutions, 48; unqualified contractors, 12; total number of establishments available, 1,301. The Pharmaceutical Service Subcommittee reported on a meeting at which five cases were considered under the testing scheme. In four cases the chemists were cautioned, and in the remaining case the chemist was censured.

Peterborough.—At a meeting of the Soke of Peterborough Insurance Committee, held on January 8, Mr. J. W. Bodger presented a report on the annual meeting of the East Anglian Pricing Bureau. In the area, 13,880,000 prescriptions were dispensed during the year. Peterborough was third on the list of cost per person for the first quarter of 1929. He had been asked whether the Soke intended to adopt the national formulary system. He had replied that the Act was being splendidly administered in the Peterborough area, and he hoped the Soke would turn down the project. Dr. Collins said the doctors did not care whether the system were adopted or not, they would go on their own way.

Festivities

Staff Dinners

THE annual winter entertainment given by the proprietors of Andrews Liver Salts was held on January 31 at their works in Newcastle. Mr. Gerald A. France (chairman of directors) replied to a vote of thanks in genial vein. The guests numbered 400, and dancing was kept up to a late hour.

THE annual social of Arthur H. Cox & Co., Ltd., took place on January 30 at the Oddfellows' Hall, Queen's Road, Brighton. There were present Mr. Ernest Edmonds (chairman), Mr. and Mrs. Edward E. Cox, Mr. and Mrs. P. J. Wigginton, Miss Mackie (secretary), Miss Elise Cox, Mr. P. Morgan Jones (auditor), several of the firm's representatives, and some 250 members of the staff and their friends. Mr. Edward E. Cox expressed his pleasure at being present at the ninetieth anniversary of the firm's existence, and he looked forward to see those present when the firm completed its centenary.

A DANCE of the staff of Francis & Co., chemists, Wrexham, was held on Wednesday, January 8, at the Miners' Institute, Wrexham, when 200 were present. The organisers were Miss E. Pritchard, Miss Simpson and other members of the staff. Music was provided by Mr. Ferguson's Premier Dance Band. Mr. J. B. Francis distributed the prizes as follows:—Bridge: 1st lady, Mrs. Featherstone-Hough; 1st gentleman, Mr. F. Davies; 2nd lady, Mrs. Wilson; 2nd gentleman, Mr. R. O. Jones. Novelty prizes were won by: (1) Mr. Formstone and Miss Davies; (2) Mr. Williams and Miss Lewis; (3) Mr. Clarke and Miss Pritchard; (4) Mr. R. Roberts and Miss Amy Edwards; (5) Mr. Elliott and partner; (6) Miss Kilson Jones and Mr. Corley.

A COMPLIMENTARY dinner given to the staff and employees by the directors of William Gardner & Sons, Ltd., was held at the Mercers' Hall, Gloucester, recently. Alderman Charles E. Gardner (chairman of the directors) presided, and was supported by the Mayor of Gloucester, Mrs. C. E. Gardner, Mr. F. C. Gardner and Mr. D. G. Price. The chairman welcomed the staff and employees, and said that the firm was founded by his father, the late Mr. William Gardner in 1859, and at that time they were simply mill-stone manufacturers. He (the chairman) had joined the firm some forty years ago, shortly before Mr. Preen, to whose work he paid a tribute. Proposing the toast of "The Firm," Mr. Preen expressed the appreciation of the staff to the directors for their generosity. Mr. C. V. Woodward seconded. Mr. F. C. Gardner replied on behalf of the directors.

Edinburgh Burns Dinner

THE annual Burns' dinner of the Edinburgh District Chemists' Trade Association took place in the North British Station Hotel, Edinburgh, on January 22, Mr. George Hall, chairman of the Association presiding, and Messrs. Currie, Girdwood and Hedderwick acting as croupiers over a large gathering of members and friends. "The Immortal Memory" was proposed by Sir Joseph Dobbie, president of the Burns Federation, and chairman of the Scottish Vernacular Association. In the course of the oration he referred to the progress being made with a new edition of "Jamieson's Scottish Dictionary," designed on a national scale, to preserve the true significance of Scottish vernacular words. Mr. J. Rutherford Hill, Ph.C., made an appeal for the Benevolent Fund of the Pharmaceutical Society, to which there was a generous response. Songs and recitations were contributed by Misses Elli Haston and Simpson, and Messrs. Bree, Hutchison and Macdonald. The interesting ceremony of piping in the haggis was performed by Pipe-Major A. G. Hall, M.A., Edinburgh University, O.T.C., elder son of the chairman, while his younger son, Mr. A. L. B. Hall, acted efficiently as accompanist. On the motion of Mr. J. Noble, Mr. James Mitchell and Dr. George Coul, cordial votes of thanks were awarded to the artistes, the secretary, Mr. James Adamson and the chairman respectively.

Hull Chemists' Annual Dinner

THE annual dinner of the Hull Chemists' Association and the local branch of the Pharmaceutical Society of Great Britain, held on January 30, was attended by a company of 150. Among those present were the Lord Mayor and Lady Mayoress (Councillor and Mrs. R. Richardson), the Sheriff (Councillor F. Till), Mr. L. Moreton Parry (president of the Pharmaceutical Society of Great Britain), Mr. H. Gillegan (chairman of the R.P.U.), Mr. S. T. Boyce (secretary of the local Association), Messrs. E. Hindle, C. A. Hewitt, H. Goodes, E. Haworth Earle, Dr. McLeod, Dr. Thompson, Alderman and G. S. Wokes. Proposing the toast of the "Pharmaceutical Society of Great Britain," Mr. J. Oliver chairman, mentioned that in a local newspaper recently he saw an article stating that two prescriptions handed in at certain shops had not been dispensed properly as written, and the persons concerned got into trouble over it. He read the report very carefully, and thought that it was not right that persons who were summoned should be described as chemists when they were not entitled to the description. Mr. L. Moreton Parry, in response, said that no other society or educational body, had made advances of the nature that the Pharmaceutical Society had made in education during recent years. They had now a supply of students equal to the demand; they were justified in making the examination more stringent year by year. He was delighted to find that the class of candidates coming forward were better trained than they used to be. It was to their advantage that the Society should administer its own affairs. Fundamental changes were coming for which they should be prepared, and it might be that the control of poison administration would be taken away from the Council. He deplored the fact that they had not the power of inspection and examination of the chemists' poison books as the police had. Mr. E. Hindle, proposed the toast of "Our City," and gave a brief outline of the history of Hull, to which the Lord Mayor replied. The toast of the "Retail Pharmacists' Union" was proposed by Mr. C. A. Hewitt, and Mr. H. Gillegan responded.

Croydon Association Dinner

MEMBERS and friends, to the number of one hundred and sixty, attended the annual dinner of the Croydon Pharmacists' Association and Branch of the Society, held on February 5. The dinner was also a celebration of the coming of age of the Association. The president of the Association (Mr. W. O. McBryde) presided, and was supported by the president of the Pharmaceutical Society (Mr. L. Moreton Parry); Mr. William Bennett, M.P.; Mr. J. A. Kenningham (organising secretary of the P.A.T.A.); the chairman of the Branch (Mr. R. Rickard), and by the officers and members of neighbouring associations. Before submitting the toasts, the chairman referred to the services rendered to the Association during the past twenty-one years by Mr. Charles Dickinson, a founder member, who had been secretary for fourteen years, president, vice-president and, for the past seven years, treasurer. Mr. Dickinson held the affection and esteem of every member; they as his friends, desired to show tangible recognition of Mr. Dickinson's worth and services. On behalf of the Association Mr. McBryde then presented him with a gold watch, suitably inscribed. Mr. Dickinson expressed his thanks. The toast of "The Houses of Parliament" was proposed by Mr. H. E. Chapman (vice-chairman of the Branch), who said that although they had a high regard for parliamentary institutions, the toast was really a peg on which to hang a tribute to Mr. W. Bennett, whose presence they regarded as a compliment to the Association. Mr. Bennett, in reply, said that he was not only a pharmacist but was, he believed, the first member to enter Parliament as a pharmacist. Mr. R. Rickard, chairman of the Branch, proposed "The Pharmaceutical Society." Mr. L. Moreton Parry acknowledged the toast. Mr. J. A. Kenningham proposed the "Croydon Pharmacists' Association," coupling with it the name of the president, Mr. W. O. McBryde. Mr. McBryde said that he was proud to preside at the twenty-first birth-

day celebration of their Association. To the members who had been the pioneers at the formation of the Association, some of whom were present that evening, they owed a lot. He mentioned in particular Mr. Charles Dickinson and their secretary, Mr. Neve. The toast of "The guests" was proposed by Mr. H. C. Neve, who referred to the presence of Alderman Higgs, who had attended the first dinner of the Association. Mr. H. Hocken, president of the Reigate and Reading Associations, replied.

Watford and St. Albans Branch Dinner

THE Watford and St. Albans Branch of the Pharmaceutical Society held a dinner at Watford on February 5. Mr. A. Sumner was in the chair, and the guests included Mr. John Humphrey (member of the Council), Mrs. Freke, Miss Sproule (president of the National Association of Women Pharmacists), the deputy Mayor of Watford (Alderman F. B. Hemming), Dr. Sidney Clarke (secretary, Herts Panel Committee). Following the loyal toast, Mr. E. C. Last proposed "The Pharmaceutical Society," and coupled with the toast the name of Mr. John Humphrey. Mr. Humphrey, in responding to the toast, complimented the proposer upon his acquaintance with the early history of British pharmacy. As it happened, the problems which chemists were trying to solve by combining to form the Pharmaceutical Society more than eighty years ago were still largely unsolved. Then, as now, chemists wished to secure to themselves the entire compounding and dispensing of medicines, and the sale of everything required specially by sick persons. Success in these respects had not yet attended their efforts and, in consequence, chemists had been driven to the sale of numerous side-lines. Probably, however, more than 90 per cent. of this subsidiary business could strictly be claimed by chemists as being legitimately theirs, and there was no reason why they should feel called upon to relinquish it. Meanwhile, the Pharmaceutical Society had developed steadily, particularly in the direction of endeavouring to raise and maintain the professional status of chemists and druggists. He was able to state that the business interests of chemists and druggists were not being neglected by the Council. Only that morning he had obtained from the president of the Society a promise that special attention should be given to the encroachment by certain manufacturers on the chemist's privilege in the matter of "known, admitted and approved" remedies, by converting stamped proprietaries into unstamped brand-name preparations. Progress was also being made in the direction of revising the Poisons Schedule in such a way as would check existing evasions by holders of licences to sell agricultural and horticultural poisons. He had hopes that other matters of direct trade interest would not fail to receive a proper share of attention from the Council, in spite of the contention in some quarters that the judgment in the Jenkin test case precluded the Society from dealing with any trade matters. One of the Council's obligations under the Society's Charter was the protection of those who carry on the business of chemists and druggists, and all that the judgment in the test case did was to prevent the Society from regulating hours of business, wages and conditions of employment, and the prices at which goods are sold, or taking up insurance business and spending money upon Industrial Council work. This still left a wide margin for safeguarding work on the business side, and he was one of those who intended to hold by the Charter in that respect. With regard to the suggestion that members of Council were allowing their time to be so fully occupied with routine work that the direction of affairs and the shaping of policy were drifting into the hands of the Society's officials, that was, of course, a danger that must be guarded against. The toast of "The Branch" was proposed by the deputy Mayor of Watford, and the chairman in his reply explained the work of the Branch, and asked for greater enthusiasm and increased attendance of members at meetings. Miss Marguerite Steabben proposed the toast of "The Ladies and Visitors," and in response Mrs. Freke made an appeal for greater support for the Benevolent Fund. Mr. Peter Gowlett also replied for the visitors. A programme of music was provided.

Associations' Winter Session

Blackburn.—The annual meeting of the Blackburn and District Chemists' Association was held on February 6, Mr. A. Lucas in the chair. The chairman thanked the members for the support they had extended to him during his year of office, and expressed the hope that 1930 would have something better in store than they had experienced in 1928 and 1929. Mr. A. Dobson moved a resolution of thanks to Mr. Lucas for his services as president. The chairman proposed the appointment of Mr. J. Eyles as president for 1930. Mr. J. E. Isherwood seconded, and the resolution was carried. Mr. Eyles, responding, thanked the members for his election. The following officers were appointed:—*Vice-president*, Mr. A. Lucas; *Treasurer*, Mr. W. H. Lightbown; *Secretary*, Mr. F. Law. Messrs. R. H. McMyn, H. Flintoff, J. Walton, A. Dobson, T. Haslam, W. Holt, T. C. Gifford and H. Slater, with Mrs. E. A. Hargreaves, were added to the Committee. Consideration was given to the suggested formation of a mutual wholesale company for the benefit of the members. Mr. J. E. Isherwood thought they had every reason to benefit from the organisation of another Pharmacy Week, though there were changes suggested by experience which he would like to see carried through. Perhaps it was better that advertising matter should be restricted to the district of the Association concerned. National advertising was very costly. Instead of having national or sectional prizes for their customers, each shop should give something, however small. He thought 5s. a head was sufficient for the general central fund, leaving the branches free to make their own arrangements. Mr. Slater thought the pharmacy week ought to extend to a fortnight. It was decided to approve the holding of another Pharmacy Week during 1930.

London (W.).—A meeting of the Western (London) Pharmacists' Association was held at 192 Oxford Street, W.1, on February 12, the president (Mr. T. Morley Taylor) in the chair. The Association agreed to the formation of a local branch of the Photographic Dealers' Association, and appointed Mr. P. S. Windwood temporary secretary. Mr. C. Morton, B.Sc., Ph.C. (Chelsea Polytechnic School of Pharmacy), opened a discussion on *The Standard for the Preliminary Examination*. Mr. Morton remarked that the Pharmaceutical Society had made a drastic change in its final examinations, but no corresponding change in the entrance examination: it had begun educational reform at the wrong end. Teachers found that the mathematics of the average student were quite inadequate; this was especially the case with regard to physics. Some students found a difficulty in the calculation of a percentage solution, and failed to realise that the shifting of a decimal point in a strychnine dose might mean the difference between life and death. Matriculation was a necessary preliminary to the Bachelor of Pharmacy degree and to the higher degrees obtainable in research. The mention of research suggested to the speaker a tribute to the memory of the late Dr. Arnall, of Cardiff, who lost his life on February 7. Continuing, Mr. Morton suggested that if the prestige of British pharmacy was to be maintained, no obstacle should be placed in the way of research workers. To impose more stringent final examinations would not diminish the number of entrants to pharmacy, but would swell the ranks of those who failed to qualify. The entrance examination should be made a real test of ability. The discussion which followed was contributed to by the president and Messrs. Falding, Atkin, Melhuish, Evans, B. R. Wilkinson, Brown and Bonner. Most of the speakers were in general agreement with Mr. Morton, who in a reply to the points raised said that the remuneration of the qualified proprietor or assistant could not be considered as a relevant factor in educational policy, and that the matriculation test demanded more than mere text-book knowledge—it made students think. The remainder of the evening was occupied by an address by Mr. R. E. Lownsborough on *Problems in Shop Fitting*, consisting of a detailed account of the alteration and partial rebuilding of an old pharmacy. Both the readers of papers were accorded a cordial vote of thanks.

Personalities

MR. L. CAMERON, Ph.C., Seaford, has been elected a vice-president of the local chamber of commerce.

MR. R. J. ARNOLD, chemist and druggist, Bideford, has been elected a vice-president of the local chamber of trade.

MR. S. A. SHEPHERD has joined the staff of John Ronaldson & Co., drug merchants and importers, 7 Mark Lane, London, E.C.3.

MR. A. MACKENZIE THOMAS, chemist and druggist, Leominster, has been elected a member of the committee of the local chamber of commerce.

MR. PHILIP F. ROWSELL, J.P., a past-president of the Pharmaceutical Society, has been appointed vice-chairman of the new Public Assistance Committee for Devon.

MR. H. F. KENT, representative in the North of England of J. C. Gambles & Co., Ltd., has changed his address to 117 Jesmond Road, Newcastle-upon-Tyne.

At a recent meeting of the Ludlow Traders' Association, Mr. W. J. Brown, Ph.C., Bull Ring, and Mr. F. G. Beeson, chemist and druggist, Castle Street, were elected members of the Executive Committee.

MR. J. EYLES, the new president of the Blackburn and District Chemists' Association, has been in business in his native town for a long period, and altogether has been associated with the drug trade for over thirty years. Mr. Eyles has few interests outside his profession, but he is keenly interested in all matters pertaining to the drug trade. Mr. Eyles's presidential address is reported on p. 185.

CERTIFICATES OF NATURALISATION have been granted to S. Deane, medical practitioner, The Sanatorium, Talgarth, Breconshire; B. Gordon, physician and surgeon, 26 Queen's Road, Dalston, London; E. Moll (known as Henry Henderson Moll), medical practitioner, Cromer Hall, Leeds.

THE fatal accident to Dr. Francis Arnall, reported on page 179 of this issue, caused injuries to three other people who were in the laboratory of the College at the time. Miss Eileen Melville, Ph.C., received slight injuries, in spite of which she ran to another part of the building to give the alarm. Mr. Vernon Lloyd, B.Pharm., Ph.C., head of the pharmacy department, sustained cuts and suffered from shock. Mr. J. D. Jenkins, chemist and druggist, chairman of the Conference Local Executive, was somewhat more seriously cut by fragments of glass, and was confined to his house for some days.

MR. J. MURRAY, F.B.O.A., chemist and druggist, managing director of Albert Hagon, Ltd., chemists, Cardiff, and local general secretary for the forthcoming British Pharmaceutical Conference, was born at Auchingray Farm, New Abbey, Kirkcudbrightshire. He has been secretary of the Cardiff Pharmacists' Association for four years, and was president in 1918. He served his apprenticeship with the late Mr. William Allen, Ph.C., Dumfries, and after experience in Bristol, Glasgow, Edinburgh and Cowes joined the staff of Mr. Hagon in 1906. This business was converted into a limited company in 1918, when Mr. Murray became managing director. Mr. Murray has always been actively associated with the pharmaceutical affairs of Cardiff, and has twice filled the position as secretary of the amalgamated Association and Pharmaceutical

Society's Branch. He is a typical Scot, sporting, genial, and with all the hospitable characteristics of his race. Both he and his family are keen golfers. One of his daughters, Miss Maisie Murray, F.S.M.C., chemist and druggist, is in charge of the optical department of the company. The younger daughter is a third-year student of architecture at the Cardiff Technical College. Mrs. Murray is identified in all the social affairs with her husband, and is assistant secretary of the ladies' committee for the forthcoming Conference.

Retail Pharmacists' Union

Election of Executive, 1930

The following time-table has been arranged for the biennial election of the Executive Committee of the Retail Pharmacists' Union: Nominations receivable up to February 20; voting papers issued on March 7; voting papers returnable, March 20; result declared at annual meeting, March 25. There are three members to be elected for each of the six following electoral divisions:

Area 1 (*Metropolitan*).—London, Middlesex, Surrey, West Ham and Walthamstow.

Area 2 (*West*).—Wales, Herefordshire, Shropshire, Staffordshire, Warwickshire and Worcestershire.

Area 3 (*South*).—Berkshire, Cornwall, Devon, Dorset, Gloucestershire, Hampshire, Kent, Somerset, Sussex and Wiltshire.

Area 4 (*North-East*).—Durham, Northumberland and Yorkshire.

Area 5 (*North-West*).—Cheshire, Cumberland, Lancashire and Westmorland.

Area 6 (*Central*).—Bedfordshire, Buckinghamshire, Cambridgeshire, Derbyshire, Essex (except West Ham and Walthamstow), Hertfordshire, Huntingdonshire, Leicestershire, Lincolnshire, Norfolk, Northamptonshire, Nottinghamshire, Oxfordshire, Rutland and Suffolks

Every member of the R.P.U. is eligible for election to the Executive Committee, but nominations must be signed by another member and must be countersigned by the candidate as his consent to allow his name to go forward for election.

Trade-Mark Applications

The figures in parentheses refer to the classes in which the marks are grouped. A list of classes and particulars as to registration are given in "The Chemist and Druggist Diary," 1930, p. 341.

(From "The Trade Marks Journal," February 4, 1930)

- "COSAVULT"; for manufacturing chemicals (1). By I.G. Farbenindustrie A.G., Mainzerlandstrasse 23, Frankfurt-on-Main, Germany. 509,265. (Associated.)
- "F.P.P. FERTILIZERS" with design of three triangles ("F.P.P." disclaimed); for artificial fertilizers (2). By Fison, Packard & Prentice, Ltd., Gippeswyk House, Gippeswyk Avenue, Ipswich. 503,420.
- "MU-COL" with label design; for an antiseptic medicine (3). By Tho Mu-Col Co., 156 and 158 East Tupper Street, Buffalo, New York, U.S.A. B496,339.
- "B.M.C.P." with two interlocked triangles ("B.M.C.P." disclaimed); for magnesium carbonate, magnesium oxide, magnesium hydroxide and fluid magnesia (3). By B.M. Chemical Products, Ltd., 49 Eastcheap, London, E.C.3. 500,999. (Associated.)
- "HELFENBERG" with silhouette design of head of Mercury in circle; for goods (3). By Chemische Fabrik Helfenberg A.G., 13 Karl Dieterich Strasse, Helfenberg, near Dresden, Germany. 503,739.
- "TRELISIN"; for all goods (3). By Chemische Fabrik Promonta G.m.b.H., 166 to 172 Hammerlandstrasse, Hamburg, Germany. 502,961.
- "ALEXOTABS"; for medicated mouthwash tablets (3). By J. S. Cottrell, 15 to 17, Charlotte Street, London, W.1. B506,494.
- "J. & B. JEWSBURY & BROWN" with triangular design; for beverages, etc. (42). By Jewsbury & Brown, Ltd., 7 Ardwick Green North, Ardwick, Manchester. 506,343 (Associated.)



MR. J. EYLES

Trade Notes

COTY (ENGLAND), LTD., 3 Stratford Place, London, W.1, inform us that Crème Coty is now available in tubes.

UNITED PHOTOGRAPHERS, LTD., Liverpool, Manchester and Leeds, announce a reduction in the price for postcard enlargements.

ALLEN & HANBURY'S, LTD., Bethnal Green, London, E.2, have introduced a container for tincture of iodine suitable for carrying in the vest pocket and which can be refilled when necessary.

QUINPHOS.—Thompson & Capper, Wholesale, Ltd., Manesty Buildings, College Lane, Liverpool, offer to send the striking screen here illustrated to any chemist who



applies for it. There is a special bonus available in connection with Quinphos until the end of the current month.

DELIVERY VANS.—Singer & Co., Ltd., Coventry, and Stratton House, Piccadilly, London, W., can supply a speedy little motor delivery van which is economical to run. Subscribers who are interested should write for a copy of the special folder D67.

SUTTLEY & SILVERLOCK, LTD., label printers, 92 Blackfriars Road, London, S.E.1, are offering special parcels of wrapping materials, particulars of which will be found in the advertisement pages.—Mr. S. C. Waggett has been appointed to the company's representative staff in succession to Mr. H. Moore.

AN ATTRACTIVE DISPLAY BOX.—Vinolia Co., Ltd., Bebington, Cheshire, have designed a new display box (dozen tablets) for Premier soap. The heads depicted on this box are taken from recent and current advertising. The large head on the display flap is employed on a large screen and on a showcard, both of which are available to C. & D. subscribers on application. Although the poster which is at present appearing on the London Underground, Merseyside and other railways advertises Vinolia shaving sticks, this will be succeeded shortly by a poster portraying this very charming girl's head.

PROBAK RAZOR BLADES.—Autostrop Safety Razor Co., Ltd., 197-207 City Road, London, E.C.1, have placed on the market under the trade mark Probak a two-edged safety razor blade, which, owing to the unusual piercing and method of manufacture, is made from a thicker steel than is generally employed. This, it is claimed, gives a better edge, and enables the blade to retain it. Probak blades will be supplied under the same policy and conditions as the Valet. There has been prepared some striking display material which is obtainable on application, and there is to be extensive advertising in the lay Press.

BRITISH INDUSTRIES FAIR.—In connection with this exhibition, which opens on February 17, at Olympia,

London, W., attention is directed to the special coloured supplement published in this issue, wherein will be found announcements by the following manufacturers:—R. Addis & Son; British Celanese, Ltd.; The British Drug Houses, Ltd.; James Burroughs, Ltd.; Corfield, Ltd.; The Corrugated Packing Materials Co., Ltd.; Cussons, Sons & Co., Ltd.; Darwins, Ltd.; Energen Foods Co., Ltd.; Graesser-Monsanto Chemical Works, Ltd.; Hindes, Ltd.; Hopkin & Williams, Ltd.; J. G. Ingram & Son, Ltd.; Ernest Jackson & Co., Ltd.; Johnson & Sons, Manufacturing Chemists, Ltd.; G. B. Kent & Sons, Ltd.; The Leyland & Birmingham Rubber Co., Ltd.; Orange-Crush Co. (London), Ltd.; Packs (1925), Ltd.; J. Pillischer, Ltd.; Solport Brothers, Ltd.; Sorbo Rubber Sponge Products, Ltd.; Spencer Brothers; Staniform, Ltd.; Thomas Tyre & Co., Ltd.; Thomas Ward & Sons, Ltd.; Waxed Bags, Ltd.; Whiffen & Sons, Ltd.; R. F. White & Co., Ltd.; Williamson Brothers, Ltd. See also p. 190.

MERMAID FACE CLOTHS.—We called attention nearly twelve months ago to the woven non-stretching face cloths of Spencer Brothers, 39 and 40 Shoe Lane, London, E.C.4. The firm is now packing these in highly attrac-



tive display cartons, as will be seen from the illustration. The cloths are available in white with coloured borders and tinted, each being wrapped in transparent paper.

A MOVE IN THE RIGHT DIRECTION.—An announcement has been made of an arrangement—one that has on several occasions been advocated in the columns of THE CHEMIST AND DRUGGIST—for the marketing of a new photographic film under the name Selo. The manufacturers concerned are Apem, Ltd.; Imperial Dry Plate Co., Ltd.; Ilford, Ltd.; Gem Dry Plate Co., Ltd.; Thomas Illingworth & Co., Ltd., and Wellington & Ward, Ltd. The prices of the new film will be the reduced ones which were published in the C. & D., January 18, p. 61, and supplies will be available about the third week in March. It is certain that all photographic dealers will appreciate the simplification due to handling one make of film in place of six.

THE Index to Vol. CXI of THE CHEMIST AND DRUGGIST is now ready, and may be had on application to the Publisher. Subscribers who have already intimated their desire to be supplied with a copy will receive one in the ordinary course.

Births

Notices for insertion in this column must be properly authenticated.

KEMP.—At 51 Hanson Lane, Halifax, on January 29, the wife of W. L. Kemp, chemist and druggist, of a daughter.

Marriages

HANBURY—SATOW.—At St. Luke's Church, Chelsea, London, S.W., on February 10, Frederick Janson Hanbury, Ph.C., Brockhurst, East Grinstead, chairman of Allen & Hanburys, Ltd., and only surviving son of the late Mr. Cornelius Hanbury, to Mary Ethel Laneaster Satow, Twinstead.

RANSOM—HARRIS.—At St. Peter's Church, Berkhamsted, on February 6, Richard Francis Ransom, third surviving son of Mr. and Mrs. Francis Ransom, of Newlands, Hitchin, to Nance, only daughter of the late Mr. Wilfrid Harris and of Mrs. Wilfrid Harris, of Byways, Berkhamsted.

Deaths

ANGELL.—At his residence, Tower House, Millbrook, Southampton, on February 3, Mr. Arthur Angell, F.I.C., aged eighty-five. Mr. Angell had been public analyst for Hampshire, the Isle of Wight, Ryde, and Winchester.

ARNALL.—At Cardiff Technical College, on February 7, Mr. Francis Arnall, Ph.D., M.Sc., F.I.C., head of the Department of Pure and Applied Chemistry, aged thirty-three. Dr. Arnall was a native of the East Riding of Yorkshire, and was educated at London University. During the European war he was on active service in the Royal Engineers in Belgium and elsewhere. Before going to Cardiff he was lecturer in chemistry and applied chemistry at the Chelsea Polytechnic, S.W. Dr. Arnall was the author of text-books entitled "The Preparation and Analysis of Organic Compounds" and "Theoretical Organic Chemistry"; he also contributed several monographs to the



Photo] [Strickson
DR. FRANCIS ARNALL

Journal of the Chemical Society. He was an examiner of the University of London, the Northern Universities, the London County Council, and the Pharmaceutical Society of Great Britain. The funeral took place at Glyn-Taff, Pontypridd, on February 12, representatives of the University, the College and the local branch of the Pharmaceutical Society attending. A resolution of sympathy was passed by the Cardiff City Council on February 10.

LOXLEY.—At 32 Chalfont Road, Oxford, on February 6, Mr. Frederick Lionel Keith Loxley, Ph.C., 66 St. Giles' Street and 9 North Parade, aged forty-seven. Mr. Loxley, who was the son of the late Mr. W. F. Loxley, an Oxford builder, was educated at the Oxford High School, and passed the Major examination in 1905. After a West-End experience as manager, he acquired the St. Giles' Street business of Mr. T. Thurland, chemist and druggist, in 1913, and subsequently took over as a branch the pharmacy previously carried on by Mr. James Palmer in North Parade. Mr. Loxley was an active freemason, a rotarian and a keen golfer. The interment took place at Wolvercote on February 8, after the first part of the funeral service had been held at St. Margaret's Church. Among the large congregation present at the service were the following members of the Oxford and District

Chemists' Association:—Mr. O. L. Carrington (president), Mr. C. J. V. Bellamy, Ph.C., Mr. J. Dolbear, Ph.C., Mr. H. C. Goodall, Mr. R. A. Neville. An appreciation of Mr. Loxley appeared in "The Oxford Times" of February 7.

COCKBURN.—Recently, Mr. Charles Taylor Cockburn, J.P., F.C.S., chemist and druggist, managing director of Cockburn & Co., Ltd., wholesale and retail chemists, 130-140 Howard Street, Glasgow, and branches, aged seventy-three. Mr. Cockburn founded his business fifty-one years ago in Rutherglen Road. The principal retail premises are now in St. Enoch Square. The funeral, conducted by the Rev. D. B. Baxter, took place at Largs cemetery on February 8, and among those present was the Lord Provost of Glasgow, who is a relative of Mr. Cockburn.

HODGSON.—On January 31, suddenly, Mr. John George Midwood Hodgson, chemist and druggist, 254 Lower Kirkgate, Wakefield, aged sixty-four.

ROWE.—At 97 London Road, Leicester, on February 7, suddenly, Mr. Walter Rowe, chemist and druggist, aged seventy-three. Mr. Rowe was the youngest son of the late Mr. J. R. Rowe, printer; he qualified in 1878, and commenced business in King Richard's Road, Leicester, in the following year. In 1883 he purchased the business of the late Mr. J. H. Toon, Granby Street. In 1918 he converted his business into a private limited company, and five years later it was removed to London Road. Mr. Rowe served a term of office as president of the old Leicester Pharmaceutical Association; he was also a well-known freemason. He is survived by a son (who was associated with him in the business) and three daughters. At the funeral service, which took place at Bishop Street Chapel, those present included Mr. Westhead (chairman of the local Branch of the Pharmaceutical Society), Mr. H. A. Martin (chairman of the local Branch of the Retail Pharmacists' Union), Mr. E. B. Ward (secretary of the Pharmaceutical Committee), Mr. A. D. Hearnshaw, Mr. T. C. Pebery, Mr. F. H. Clark, and Mr. S. F. Burford (retired analyst).

SLEIGH.—On February 5, Mr. Frederick Bentley Sleigh, chemist and druggist, 14 Market Place, Willenhall, aged sixty-one. Mr. Sleigh, who was a native of Walsall, served his apprenticeship in Birmingham, and gained further experience at Walsall, Bridlington and Bristol. He carried on business at Willenhall for twenty-seven years, and was an active member of the Wolverhampton and District Chemists' Association. Mr. Sleigh had many interests outside pharmacy, including music and church work. A man of culture and charm, generous and unselfish, he will be much missed by his numerous friends. He leaves a widow and two daughters. At the Crematorium funeral service several local chemists were present, including Mr. A. G. C. Paterson (president of the Association) and Messrs. Coleman, Dunn, Hagyard, C. M. Warner and H. L. Warner.

WESTON.—At "Bodlondeb," Runcorn, on January 29, Mr. John Henry Weston, chemist and druggist, aged sixty-four. Mr. Weston had been in business at Runcorn for forty years, and was a member of the Cheshire Pharmaceutical Committee.



MR. C. T. COCKBURN, J.P.

Information Department

INFORMATION WANTED

C/112. Calow's remedies and	G/102. Leech brand flycatchers.
goitre pills.	C/72. Vaccin par voie buccale
B/62. Heelwing socks for	E.P.C. (antizymines)
boots	B/102. Zoids throat tablets

Observations and Reflections

By Krayser III

National Dispensing

and its magnitude have been ably explained by Mrs. Irvine (*C. & D.*, February 8, p. 154), whose experience in connection with the subject of her discourse at Portsmouth is probably unique. She has been a chemist on the panel, and has taken a prominent part in elaborating the prevailing system of pricing prescriptions in England and Wales, after personal experience of the Scottish system. In addition, she spent some considerable time in the service of the Ministry of Health during the war period. As a consequence Mrs. Irvine has enjoyed exceptional opportunities of studying the problems connected with National Health Insurance dispensing from different standpoints, and appears to have learned to consider those problems impartially. Now that so many years have elapsed since the national dispensing service came into operation, it is conceivable that there are many chemists engaged in the service who possess but faint knowledge of its beginnings, and it must come to them as a revelation to have the story presented to them as Mrs. Irvine relates it. The younger generation of chemists in business on their own account will profit by studying Mrs. Irvine's account of the development of a system which, whatever its shortcomings, is one of the most remarkable political achievements of the twentieth century.

Memorials

in metal or stone are among the troubles which mankind inflicts upon itself, for no sufficient reason of which I am cognisant beyond that of advertising our sense of loss. The Glyn-Jones memorial, which has recently been unveiled (*C. & D.*, February 8, p. 156) is probably no exception in this respect. Its unveiling has, nevertheless, provided an opportunity for eliciting from a prominent medical politician an important statement concerning events associated with and following the passing of the National Insurance Act. That statement is of the greatest possible interest to chemists and druggists, as explaining in some degree the difficulties attending the adoption of novel legislative proposals, and, more particularly perhaps, securing parliamentary sanction for exceptional treatment of special sectional interests. Dr. Addison's address appeals to me as the outstanding feature of the ceremony on February 5, contrasting as it does with other speeches by its obvious sincerity and due sense of proportion.

Brand-Name Proprietaries

and the problem involved in the marketing of the same by manufacturers who formerly attached medicine-duty stamps to their preparations are at last beginning to receive from chemists and druggists the attention which the subject merits. Proof of this is afforded by your correspondence columns, as well as by the latest report of the executive of the chemists' union (*C. & D.*, February 8, p. 158), and the statement that the matter is to be discussed by the Council of the Pharmaceutical Society. Let us hope that the powers that be at the Bloomsbury Square headquarters will take a broader outlook in this connection than the people at Queen Square, who appear to be giving little consideration to the question of principle involved and troubling themselves unduly about the amount of the retailer's profit. This is quite a wrong way of dealing with the matter, as the maintenance of the chemist's right to sell certain medicines unstamped is of immeasurably greater importance than any variation in the margin of profit on proprietary articles.

Council Business

is either increasing in variety, or more of it is being reported than formerly. I note that you have held over part of your latest report of the Council's proceedings. The registrar's report shows increases in the numbers of registered chemists and of members of the

Society, and an increase in the number of shops visited for inspection purposes. I wonder how many of those were shops where agricultural and horticultural poisons are sold under licence, possibly in the absence of the actual licensee, and where poisons not covered by the terms of the licence are obtainable. Mr. Rowsell is reported as expressing regret at the diminishing number of student-associates, but what real inducements are there for such? The board of examiners' report is worthy of detailed scrutiny, but should not be taken too seriously in view of the recent changes in the system of examination.

As a Medicinal Agent

salt to-day is not reckoned as of much account; that is, so far as appears from the scant notice it receives in the usual text-books. From the earliest days its essential character has been appreciated. Pliny the elder wrote of it that it was such an essential article for civilised life that its very name had been adopted to designate the pleasures of the mind and all the graces of life and the grateful recreations succeeding the daily toil. Notwithstanding this, we must not be oblivious of the fact that salt is daily being employed as a remedial substance in a great variety of ways, although such means are not tabulated in the treatises of pharmacology. It is only required to mention mineral waters, sea-bathing and the manifold resources now available at the numerous native and Continental spas to obtain a glimpse of its value as an indispensable constituent of the various waters. At the present time it is not usual for our physicians to prescribe it as a medicine; but in the days of Pliny, as mentioned in your monograph (*C. & D.*, November 9, 1929, p. 572), they found many uses for it, and employed a number of different kinds. A considerable proportion of his thirty-first book is devoted to a description of the numerous varieties and their usefulness for sundry ailments. In one matter it appears that the folk of his time esteemed its virtue as much as is done to-day, for he writes, in respect of its constringent virtues:—"the salt brought out of Cappadocia in little earthen-pipes [slabs or tiles] hath the name to make the skin sliche and faire; but for to lay the same plaine and even and make it looke full and plumpe without rivels [wrinkles] the salt which I call Citian [Citium in Cyprus] hath no fellow. And therefore women after they bee newly delivered of child use to anoint and rub their bellies with this salt incorporate with melomithium."

The Citian Salt

was, almost certainly, what we call a bay salt (Citium is the present Larnaca), an article which is the peculiar form of sodium chloride generally asked for at the chemist's. Bay salt or sea salt has for many years had a reputation, in my opinion, based on a good foundation of experience, as of great usefulness for bathing contused limbs, sprained muscles, and for assuaging the pains of footsore people. From time immemorial it has been employed for salting fish, and, consequently it is an article of commercial importance. The significance of it in this respect was the cause of the writing of a most interesting volume, which is comparatively unknown, but greatly esteemed by those who are acquainted with it. Dr. William Brownrigg, of Whitehaven, wrote his "The Art of Making Common Salt" (published in 1748) for two reasons, namely, to find employment for the numbers of seamen returning after the restoration of peace who could be profitably engaged in the fisheries if supplied with suitably good salt, and because he believed that the manufacture of the bay salt could "be brought to the same perfection in Britain, as in some neighbouring countries and that large sums of money might be saved in the nation, which are now annually paid to the French and other foreigners; its fisheries might be greatly improved; and its navies and commerce and many of its richest colonies would no longer depend upon its enemies for one of those necessities without which they cannot be supported."



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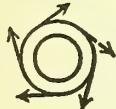
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Editorial Articles

The British Industries Fair

On the eve of another British Industries Fair, and fifteen years after the establishment of the series, we may not inappropriately review the rise and progress of this feature of British commercial life. Comparatively early in the course of the greatest war in history the Commercial Intelligence Branch of the Board of Trade decided to organise a buyers' fair, somewhat on the lines of continental trade fairs, primarily for the purpose of adducing evidence that British industries were not so dependent on foreign suppliers for raw materials and finished or partly finished goods as had been supposed. The outcome of its efforts was the first British Industries Fair, opened without formal ceremony at the Royal Agricultural Hall, London, N., on May 10, and visited on the first day by her Majesty the Queen. It was a good omen that every department was complete in time for the opening of the Fair. This being an initial venture, no surprise was felt that the sections included only pottery and glass, cutlery, clocks, printing and stationery, silver and electro-plate, toys and games, and fancy goods. The exhibitors numbered 600; and the Fair, which closed on May 21, was visited by about 27,000 trade buyers. An innovation was made two years later by the setting up of an independent section at Glasgow, where the exhibits comprised textiles, boots, foodstuffs, and domestic chemical products. Chemicals and drugs established themselves as regular features from this time onwards. In 1920 a Birmingham section was added, and to it were allotted goods, such as machinery, which differentiated it from the London section; in 1922 the three sections were reduced to two, London and Birmingham; in 1925 the London section was temporarily dropped; and in 1926 the experiment of admitting the general public in the evenings was introduced. We may conveniently outline these changes in tabular form:—

Year	Held in London at	Held also in
1915 ..	Royal Agricultural Hall ..	—
1916 ..	Victoria and Albert Museum ..	Glasgow
1917 ..	Victoria and Albert Museum ..	Glasgow
1918 ..	Port of London Authority, Pennington Street, E.1	—
1919 ..	Port of London Authority, Pennington Street, E.1	—
1920 ..	Crystal Palace	Glasgow and Birmingham
1921 ..	White City	Glasgow and Birmingham
1922-24..	White City	Birmingham
1925 ..	—	Birmingham
1926-29..	White City	Birmingham
1930 ..	Olympia	Birmingham

In one of the earliest volumes of THE CHEMIST AND DRUGGIST the late C. W. Quin recorded that at the first International Exhibition, held in London in 1851, only half the 270 exhibitors of "chemical and pharmaceutical products" were British; by contrast, the British Industries Fair of 1929 (which, as its name implies, was exclusively for British goods) had "streets" of stands extending to an estimated length of eight miles. This year's Fair opens on February 17 and closes on February 28. We take the opportunity of calling the attention of our subscribers and others interested to the fact that THE CHEMIST AND DRUGGIST has again taken a stand (B.72: telephone, Riverside 5425); it is hardly necessary to add that trade visitors will be welcome, and that we trust they will avail themselves of the facilities for correspondence and so forth which will be at their disposal. In particular, we hope that visitors from overseas will make themselves known to our representatives. It has been said that the British Industries Fair is the shop window of Empire. In the past the constituent parts of the Empire may at times have laid themselves open to the imputation of thinking in terms of the parish pump; but the growth of this vigorous institution is impressive evidence of a change of outlook, if such a change was needed. Colonial and foreign visitors will, no doubt, supplement with statistical and other information, the facts set forth by means of the exhibits, thus acquiring a just appreciation of what the industries of this country have set themselves to accomplish.

The Position of Copper Sulphate

THE setback noted in our export trade in copper-sulphate in recent months has been commented upon a good deal in trade and even parliamentary circles lately. The British industry, as we have previously pointed out, was badly crippled through the Government export prohibition during the war and armistice period, and subsequently the makers lost the bulk of their overseas' business to Continental manufacturers. Lost markets could only be partly recovered, chiefly because of the rapid expansion of manufacturing on the Continent, particularly in Italy and France. These two countries are now the largest producers, with Great Britain ranking third only, after being the leading producer before the war. Under the British prohibition, which was allowed to remain in force longer than necessary, all the large consuming countries such as Italy, France, and even Spain, had perforce to see to their own needs and the outcome of this has proved a severe blow to the British industry, which it is to be feared will never regain its premier position as a producer, although it still plays a very important part in the export markets. Quite apart from difficulties which have impaired the home industry, the fact has to be noted that the full effect of the grossly inflated price for the metal since towards the end of March in the past year, is now making itself felt on the demand for copper-sulphate. The progress of the outlet for the current season has certainly been interfered with, largely on account of the abnormally high cost; and at the same time, manufacturers have been handicapped by the carrying of considerable surplus stocks from the previous season, which has had a more restraining effect on the demand from consumers in Southern European countries for the spraying of vines. When the position was last dealt with in our issue of April 27 (p. 513), the trade was in an exceptionally disturbed

condition, entirely due to the huge fluctuations in the price of rough bar copper up to £97 15s., which was followed by a temporary reaction later in that year to £66 5s. for prompt delivery. This unexpected phenomenal rise caused British sulphate makers to temporarily raise their terms to about £35 per ton f.o.b. for casks, less the usual discount, but this figure, of course, prohibited business, and quickly declined by well over £6 a ton in sympathy with the subsequent collapse in the metal. Up to about that period the British industry had retained its considerable recovery in exports, noted within the years 1927 and 1928, but in spite of its position having been strengthened to some extent against foreign competition (under the control of the British Copper Sulphate Manufacturers' Association, which came into existence soon after the armistice, its activities became handicapped by increased foreign competition and also by tariff rates being raised in certain importing countries who were good customers to this country. Recently, Portugal made a drastic change in her import duty, raising it from about 9s. to as much as £4 10s. a ton—a very serious matter to British makers, which was made the subject of representations in the House of Commons to the President of the Board of Trade. According to the statement made by the latter, a protest has been made to the Portuguese Government through the British Ambassador at Lisbon, which it is to be hoped will result in the absurdly high new duty being at least materially curtailed, even if its object is to encourage manufacturing by domestic plants at the expense of the local consumer. This is about the time of year when users of sulphate usually look round for the filling of their needs for the spring and onward, but demand so far has been comparatively quiet and prospects are said to be disappointing for manufacturers, largely owing to the high price. In their last annual report, the Montecatini interests, who with affiliated concerns contributed 77,179 tons, or well over 75 per cent. of the whole Italian output for the 1928-29 season, stated that the domestic outlet which had been very active for the preceding season became difficult in the ensuing season owing to the rise in price. Last year's severe weather conditions, while possibly favouring the state of the vineyards, did not help in stimulating the outlet for the product as might be expected in the event of mild weather. So far as the British export trade is concerned, there is not much to be expected in the way of new buying after the early spring. The closing prices, per ton, of standard rough bar copper and that of copper sulphate for the last four years with the latest quotation are as follows:—

—	Standard rough bars prompt delivery	Copper sulphate f.o.b. less 5%
	£ s. d.	£ s. d.
1926	56 3 9	24 0 0
1927	60 15 0	24 10 0
1928	74 10 0	27 5 0
1929	68 0 0	27 0 0
1930 (February 8)	74 12 6	27 0 0

The extreme points touched for the metal in the past year were £97 15s. and £66 5s., and this year so far £69 and £74 15s. Although the current price is very high it still stands at several pounds a ton below the parity of the controlled price of American electrolytic, which is held at £84 6s. 3d. United Kingdom exports of copper sulphate for 1929 were 41,574 tons, against 47,857 tons for 1928, and the previous lowest returns were for 1926 at 37,821 tons. These figures compare with 27,997 tons for 1921, and 75,633 tons and 84,100 tons for the years 1913 and 1912 respectively. It is interesting to note that Russia has mapped out a programme to manufacture 13,000 tons within the next three years.

Pharmaceutical Society of Great Britain Council Meeting

(Concluded from the C. & D., February 8, p. 164.)

WAR AUXILIARY BENEVOLENT FUND

The Committee of this fund reported that they had received three applications during the month, and recommended grants ranging from £26 to £50. The quarterly report showed that thirteen grants had been made totalling £861. The report was adopted.

FINANCE COMMITTEE

The financial statement showed that receipts since the last meeting, including a balance of £21 13s. 6d., amounted to £9,495 12s. 7d., comprising the following items:—Subscriptions, £6,696 18s.; registration fees, £359 2s.; examination fees, £2 2s.; certificates of qualification, £3 3s.; restoration fees, £1 1s.; Pharmacological Laboratories, £185 17s.; penalties, £96 16s. 9d.; "Pharmaceutical Journal," advertisements, etc., £1,497 2s.; Quarterly Journal, £76 1s.; "Pharmaceutical Pocket Book," £53 12s. 6d.; Year-Book Index, £110 2s. 1d.; Calendar, 17s. 3d.; Registers, £2 8s.; examination questions, £5 6s. 11d.; Pharmaceutical Press publications, £14 16s.; B.P. Codex, £111 1s. 3d.; "Forensic Pharmacy," £13 17s. 2d.; interest on investments, £224 10s. 4d.; deductions for F.S.S.U., £13 5s. 6d.; sundries, £5 19s. 4d. Payments ordered at the last meeting amounted to £5,947 16s. 11d., and £3,500 had been transferred to deposit account, leaving a balance of £47 15s. 8d. The balances on the other accounts were:—Benevolent Fund (current account), £25 9s. 8d.; Benevolent Fund (donation account), £40 15s. 8d.; War Auxiliary Benevolent Fund, £47 17s. 2d.; Orphan Fund, £16 10s. 5d. The report recommended that accounts amounting to £9,494 8s. 1d. be paid, and that the action of the secretary in making payments amounting to £1,275 12s. 11½d. be approved.

The PRESIDENT reported that the gift of £100 towards the cost of the general index to the Year-Book had been received from Mr. D. Lloyd Howard, who was always generous in his support.

The VICE-PRESIDENT said it was another example of the great interest Mr. Lloyd Howard took in the Conference.

The report was adopted.

ORGANISATION COMMITTEE

The report of this Committee stated they had considered an offer from the "Apotheker-Zeitung" to loan on hire, for a period of fourteen days, a film showing the development and practice of pharmacy in Germany. The cost of hire would be £10. A suitable projecting apparatus could be hired at a cost of £3 an evening. Inquiry had shown that the film, being non-inflammable, was free from any County Council or police regulations. The film illustrated many phases of the apothecary's work, such as the detection of adulterated drugs, the nature of his studies, his care in preparing medicines and in dispensing them, the lay-out of his pharmacy and the contents of each room, his procedure with prescriptions, and so on. The Committee believed that a film such as this, illustrating the work of pharmacists of another country, would arouse considerable interest here. The difficulty of the sub-titles being in German could be overcome by having a speaker accompanying the film. They recommended that the film be hired for a month in the 1930-31 season, and that the secretary be authorised to arrange for its exhibition before any branches prepared to furnish a hall, operator and projector, the expenses of the speaker being defrayed by the Society. Consideration was given to a resolution from the Preston Branch regarding limiting the number of apprentices (C. & D., January 11, p. 38). The Committee were reminded that letters asking the Council to consider the controlling of entrants into pharmacy had been received also from the Retail Pharmacists' Union and the Cardiganshire,

Carmarthenshire and Pembrokeshire Branch of the Society. The Committee recommended that Mr. Simmons be asked to deal with the subject in conjunction with the subject of matriculation as the preliminary standard.

Mr. GUTHRIE pointed out that the exhibition of the film would necessitate considerable expenditure.

Mr. NEATHERCOAT said there was always expense attached to the branch meetings, and he did not think the film would increase it very much.

Mr. HINES asked if anybody had seen the film.

Mr. NEATHERCOAT said they had seen a synopsis, and it appeared as if it would be very interesting.

Mr. PECK approved of the idea, and hoped the film would be exhibited in their own hall. The report was adopted.

This was all the public business.

Evening Meeting in London

THE fourth evening meeting of the winter session was held in the lecture-theatre, 17 Bloomsbury Square, London, W.C.1, on February 11, the president (Mr. L. Moreton Parry) occupying the chair, supported by Mr. A. R. Melhuish (vice-president) and Mr. H. N. Linstead (secretary). There was a good attendance, including Messrs. Jenkin, Brewis, Frank Browne, Wallis, Linnell, Keall, Slade, Falding, Fouracre, Skinner, F. W. Adams, H. Treves Brown, H. Deane, H. Martin, Dr. K. Coward, and a large number of students.

The PRESIDENT expressed pleasure at the good attendance. He introduced Dr. T. G. Hill, professor of plant physiology in the University of London and head of the department of botany and director of the botanical laboratories at University College. Dr. Hill was educated at the Royal College of Science and had been lecturer in general biology in the medical school of St. Thomas's Hospital and lecturer in botany at Goldsmiths College. He had a number of papers to his credit, chiefly on the anatomy, ecology and physiology of plants, and was an examiner to the Pharmaceutical Society. He called on Professor Hill to deliver his lecture on

The Biologic Factor in Plant Anatomy

[ABSTRACT]

Radkofer and Solereder made taxonomic anatomy an important branch of botany. In qualitative work anatomical characters must be rigid and unaffected by changes in the environment of the plant, and modifications in the morphology and anatomy which are associated with an amphibious or an aquatic habit must be recognised. It is not, however, recognised that the more particular features, which are sometimes relied on for taxonomic purposes, are anything but rigid, and are susceptible to changes in the conditions of growth, both internal and external. Boodle demonstrated that a bracken frond grown in a sheltered place was more foliose, more spreading, softer, lighter in colour, and hairless, compared to a frond grown in exposed surroundings. The exposed leaf possessed a well-differentiated structure, including a hypodermis, whilst a leaf grown in shelter had no hypodermis, a mesophyll differentiated, a greater air-space system, and a chlorophyll containing epidermis. Yapp's observations on *Spiraea Ulmaria* showed that both in "sun" and "shade" leaves there was a marked periodicity in size, an increase in size from below upwards to a point, and then a diminution and a narrowing of the leaflets of the highest leaves. The size of the "sun" leaves was much less than that of the "shade" leaves, and the higher the leaf on the floral axis the greater the number of hairs. With regard to the internal structure, the same differences between the "sun" and "shade" leaves were observed as in the corresponding leaves of the bracken, with the exception of the entire absence of hypodermis and of chlorophyll in the epidermis of all leaves of *Spiraea*. The examination of the leaves at different levels of one shoot led to the observation: The higher the insertion of the leaf on the axis the thinner the leaf; the greater number of stomata per unit area of

surface; the smaller the cells of the mesophyll; the greater differentiation of the mesophyll into palisade and spongy parenchyma; the lesser the area of the intercellular space system; and the less wavy the outline of the cells of the lower epidermis. Thus the general conclusion was reached that the higher the leaf the more xeromorphic were its characters.

Too little attention sometimes is given to the principle that a character is a mean value.

Stomatal Frequency

The stomatal frequency of leaves—the number of stomates per unit area—was an aspect studied by Salisbury, who confirmed many of the foregoing observations and extended them. A summary of the more important of his results indicates that the stomatal frequency shows wide variation in one and the same leaf, hence the necessity of many countings; in the ordinary dorsiventral leaf the stomatal frequency increases from the base to the apex and from the midrib to the margin; in many monocotyledonous leaves, however, the middle region shows the highest frequency, the basal and apical regions having lower frequencies. The extent that a plant community conforms to the individual plant in these matters was shown by Salisbury's examination of the component plants of a wood, a typical plant community. This led to the generalisation that the stomatal frequencies are highest in trees and lowest in the herbaceous vegetation, the shrub layer being intermediate; further, the plants of the margin showed a higher frequency than those of the centre. There is thus a conformity between the individual and the community. The contemplation of many countings led Salisbury to the conception of the stomatal index which is based on the assumption that in a given set of conditions a species tends to form a definite proportion of stomatal initial cells. Where S is the number of stomates in a given area and E is the number of epidermal cells in the same area the stomatal index is given by the formula:—

$$S.I. = \frac{S}{S+E} \times 100$$

and this has proved of value in the elucidation of some of the problems. Another feature of leaf structure, venation, was studied by Zalenski, who made measurements of the length of the fine veins per unit area of surface, and who found that the higher the leaf the greater the total length of veins. These observations led him to make further quantitative studies. His results were concordant with those given above. Zalenski was the pioneer in these quantitative studies, but, unfortunately, his papers were, in the main, written in the Russian language.

The leaf is a very plastic member of the plant body. Regarding the environmental factors operating, the expressions "sun" and "shade," and "exposed" and "sheltered" connote that if a leaf is exposed to high insolation it is surrounded by air freely moving, and hence often of a low humidity; on the other hand, shade condition indicates a low light intensity with a more or less stagnant atmosphere, and thus of relatively high humidity. Obviously, leaves of a high insertion will be subjected to the first set of conditions, whilst those lowly placed will be subjected to the second. Similarly, the marginal plants of a wood will be surrounded by a relatively drier atmosphere than those more centrally placed. Thus external conditions possibly operating are light intensity and the humidity of the atmosphere. Maximov found that a bean leaf grown in a certain light intensity showed roughly four times as many stomata and a much denser network of veins than leaves of the same plant grown in light of four times lesser intensity. To what exactitude the humidity of the atmosphere was controlled is not clear. The carefully controlled experiments carried out by Salisbury indicate that light is without influence, for leaves grown in light of various intensities, but in the same humidity, showed no significance in the stomatal frequencies corresponding to the differences in the illumination. The density of the network of veins was not examined by Salisbury. The structure of the plant may be influenced by the wetness of the soil and the humidity of the atmosphere, but it must be observed that these two conditions are generally

intimately connected. Kokin examined the leaves of the bean grown in a dry and a damp soil; in the former conditions there were roughly twice as many stomates per unit area, a less wavy outline of epidermal cells, and a somewhat more dense network of veins as in the damp soil. The stomatal indices were respectively 26 and 23. With regard to the influence of air moisture on the structure of bean leaves, Lebedinsev found that in a drier atmosphere the length of the veins was greater and the number of stomates were greater than when grown in moister air. It would appear that the difference in the stomatal frequency are insignificant, since in both conditions the stomatal index approximates very closely.

The common factors of the environment are not entirely accountable for the observed differences in the structure of mature leaves. But at the same time Zalenski's generalisation that the anatomical structure of a leaf is a function of its distance from the root system, i.e., the internal supply of water; this with the observations of other workers, forces the conclusion that water must be the chief determining factor in the changes described.

A mature leaf, although it may slowly grow throughout the vegetative season, and change its size according to its degree of turgidity, does not undergo any significant structural change. Differentiation into permanent tissue elements takes place in the merisomatic leaf *primordia*, so that the conditions, both internal and external, operating during the early stages of the leaf's existence are responsible for the ultimate structure of the leaf. It has been seen that humidity (water) is a factor of prime importance. Internally, observation has shown that the more distant the member from the main water supply the greater the suction pressure of the living cells, and this is in accordance with Zalenski's and Yapp's generalisations and with Salisbury's observations on stomatal frequency. The external humidity is a factor influential in checking or accelerating the rate of transpiration. The leaf shows modifications in the structure of its various parts in accordance with these factors. To emphasise the point reference may again be made to the fact that the stomatal frequency of the base and of the apex of monocotyledonous leaves, which parts are the first to be differentiated from the merisomatic leaf *primordium*, approximate, is lower than that of the intermediate part, which is differentiated later and in drier conditions. The problems involved are merely formulated, but it will be obvious that the structural features of leaves are greatly influenced by biologic factors, and caution is necessary in their use in taxonomy. Very many observations to find the range in variation are requisite, together with cultural experiments.

The PRESIDENT, after remarking on the interest and fascination with which he had listened to the lecture, recommended the topic to the attention of the students who were present. He called on Dr. Coward to propose a vote of thanks to Professor Hill. Mr. Alfred Jenkin seconded the proposal, to which Dr. Hill humorously replied.

Evening Meeting in Edinburgh

(Concluded from the C. & D., February 8, p. 168, which contained an abstract of a paper by Mr. J. P. Todd, Ph.C., entitled "The Stabilisation and Fermentation of Belladonna Leaves.")

DISCUSSION

Mr. J. J. BLACKIE said he was glad to learn that Mr. Todd had found that the stabilised belladonna leaves were no better in alkaloidal content than the carefully-dried leaves. He found that the belladonna leaf is one of the most difficult to dry. If carefully dried at a low temperature, the colour is well preserved and the alkaloidal content is up to standard. Leaves collected in August keep well for, perhaps, twelve months.

Mr. A. CURRIE said he thought fermentation of the leaf, if it was not carefully dried, altered the whole character of the leaf and the preparations made from it. If the leaf was carefully dried, he did not see that much was to be gained by stabilising the leaf by destruction of the enzymes.

Mr. RUTHERFORD HILL said Mr. Todd had indicated that destruction of glucosidase active principles by enzyme

action had attracted more attention than that of alkaloidal active principles. This was probably due to the fact that glucosides were less stable than alkaloids. While that was true of some alkaloids, there were others (such, for example, as those of belladonna) which were less stable than such alkaloids as strychnine or morphine. With regard to the statements as to loss of morphine through enzyme action on keeping, that point had been rather called in question, particularly by Mr. Dott, who had submitted carefully-conducted assays of opium kept for various periods without any appreciable loss of morphine content. The same point had been corroborated in a way by an analysis of Turkey opium which had been kept for something like fifty years, and which Dr. Watt had found still to contain the average percentage of morphine found in Turkey opium. He gathered that the general conclusion of Mr. Todd's research as to the value of stabilisation was negative. In other words, a well-harvested leaf was as good, if not better, than one which had been subjected to the process of stabilisation.

Mr. Todd, replying, said he had experienced the blackening of belladonna leaves referred to by Mr. Blackie. In addition to the loss of green colour caused by the action of the chlorophyllases in prolonged methods of drying, he had experienced trouble due to the rapid development of a common soil organism, which he had identified as *Megatherium*. On another occasion, when testing a method of destroying the lipase of wheat germ, one of the solutions became contaminated with *Megatherium* and the contents of the flask turned black. In both cases he concluded the coloration was due to the presence in the bacteria of tyrosinase, which, acting on the tyrosine of the proteins, produced a melanin. This blackening was accompanied by a disgusting odour, with which he became so familiar that he could diagnose *Megatherium* without a microscope. With regard to variation in the green colour of tinctures of hyoscyamus, he thought the colour of the leaf might vary from the natural fresh green to a brown by a prolonged slow drying. The loss of colour was due to the action of the chlorophyllases and also the oxidases, which, in slow drying, were allowed to produce changes in the colour of the leaf, and, consequently, of the tincture. With regard to the question of loss of morphine in opium, there was present an oxidase in the opium, and in solution undoubtedly the oxidase reacted with the morphine, rendering it insoluble, and in this way the ordinary assay process should indicate a decrease in morphine content. He could not understand how the oxidase and the morphine could be together in the opium without some such result taking place. In attempting to carry out some experiments on the relative morphine content of opium he had experienced difficulty from want of definiteness in the recognised assay processes.

The next communication was on :—

The Colouring Effects of Iron

By ERIC KNOTT, PH.C., F.C.S.

[ABSTRACT]

THE element iron is abundantly and so widely distributed in nature, and is so frequently an essential element in the organs and secretions of animals and plants, that naturally the metal is present in many of our galenicals. Its tinctorial power is remarkable, and especially so when associated with organic matter. As iron appears to be a common constituent of crude drugs so it appears to be present in many of our galenicals. Digitalis leaf contains iron, being an essential element in the formation of chlorophyll (though chlorophyll in itself does not contain the element); but it does not necessarily follow that the infusion or tincture will contain the metal, yet they do, not in sufficient quantity to give an iron reaction by direct application of the usual reagents, but quite sufficient if the residue of 2 fl. oz. of the tincture or a pint of the infusion is used; and as with digitalis so with gentian, cloves, cinchona, rhubarb, belladonna, taraxacum and many others.

It appears that when the colour of a galenic is yellowish brown, or "rusty" like, iron, so far as my experiments have been applied, is present. Squill bulb yields a yellowish tincture. The ash of the bulb has invariably given a reaction for iron—the tincture never, but the vinegar invariably does. If iron is a normal constituent

of the squill bulb, it may be there as an alcohol-insoluble compound so that it does not appear in the tincture. Vinegar of squill, on the other hand, invariably gives the reactions for iron. This does not prove that squill contains iron. The iron of the vinegar may have been introduced by the acid, as traces of iron are sometimes found in the acid, and in many organic acids, the presence of which is the cause of that development of colour sometimes seen in such galenicals as liq. bismuth et ammon. cit., liq. ammon. cit., lin. terebinth acet. Citric acid I have never met absolutely free of iron. Some years ago, Mr. Wilson, of Burntisland, drew attention to the presence of iron in caffeine citrate, and which he showed to be the cause of the discolouring in a phenazone mixture—the colour of the mixture being remarkably deep when the quantity of iron present was considered. I have met a similar discolouring in the following nasal douche:—Sodii chlor. 2 oz., sodii bborat. 2 oz., sod. salicyl. $\frac{1}{2}$ oz. This remained white for weeks, but colour gradually developed. Iron is present, possibly introduced with the sodium chloride. The B.P. gives a test for the limit of iron which indicates that a trace may be present in all samples of sodium chloride even though strictly B.P. It may, of course, be introduced by the use of a steel spatula. How often do we see the colour of compound rhubarb pills altered by the laborious use of a steel spatula during the massing, and a violet-tinted ammoniacum mixture, the dispenser forgetful of the presence of salicylic acid in the gum. Steel should never be allowed to come in contact with anything of the nature of an acid or phenol, if moisture is about. Some galenicals may discolour on keeping. Saccharated solution of lime usually discolours yellow. Mr. C. Arthur showed that the liquor made from iron-free lime keeps water white. Mr. Elliott drew attention to the development of colour in the following:—P. tragalac, 40 gr., ac salicyl, 10 gr., spt. vini rect. 3 dr., glycerin. 2 dr., aq. ad 10 oz. Here the colouration was due to traces of iron in the gum, causing a pink colouration to develop. Darkening takes place in glycerin of tannic acid: this is due to iron in the glycerin, for the B.P. monograph on characters and tests gives a limit test for iron. One has to be careful that the reagents do not introduce iron. To avoid this risk in "ashing" the following process was adopted:—alcohol redistilled was used to moisten the crude drug. The moistened drug was spread out in a thin layer in a crucible, ignited, the residue extracted by boiling with water, acidulated with iron-free hydrochloric acid, and the solution tested with ammonium sulphocyanide. The high tinctorial power of iron is readily illustrated by aqueous solutions of tannic acid, potassium sulphocyanide, and sodium salicylate to each of which ferric chloride is added. Even in the proportion of 1 in 10,000,000, looking down a deep Nessler tube, the colour of the first and last can be distinguished. The sulphocyanide colour is not quite so definite at the highest dilution.

DISCUSSION

Mr. LOTHIAN said this was a useful practical paper. It might be said that the presence of iron in galenicals was by no means so common as it used to be. Formerly it was not uncommon to find sodium salicylate giving a pink colour with such a substance as magnesium sulphate. There were instances in which it was difficult to eliminate iron. In the case of vinegar of squill, one wondered if the contamination might not have come from the metallic percolator used in the process of manufacture.

Mr. CURRIE said that if a mixture was sent out colourless and acquired colour in the hands of the patient, it was very difficult to persuade the patient that the medicament was quite correct.

Mr. HILL said that very frequently instances arose where an explanation of the unexpected development of colour could be traced to the presence of a small quantity of iron. This coloration might arise from the presence of a trace of iron in the substance or from contact with a steel spatula or other implement containing iron in the process of dispensing. On one occasion in a particular research it was necessary to use iron-free citric acid, and he found no such article could be obtained, the very purest samples containing a trace. In another instance traces of iron which interfered with a colour reaction were traced

to the sulphuric acid used as a reagent. It was found impossible to obtain commercially a sulphuric acid absolutely iron-free, and it was found necessary to have some specially distilled from a platinum still. On that occasion he got a distinct impression that sulphuric acid which had been standing for some time in deep green glass reagent bottles had derived some trace of iron from the glass.

Mr. KNOTT, replying, said at least in the case of one sample of vinegar of squill he could guarantee that Mr. Lothian's point about the iron percolator did not arise. Possibly on the manufacturing scale such contact with iron might explain its presence in the galenical preparation. Mr. Currie's point about a client being difficult to satisfy when a medicine developed colour was illustrated by the case of the nasal douche. He thought it would be an advantage if in the B.P. there were introduced colorimetric tests for the limit of iron just as there are tests for the limits of lead and arsenic.

The next communications were on:—

MacLean's Powder: What is Calcium Carbonate

By J. RUTHERFORD HILL, Ph.C.

[ABSTRACT]

THE POINTS discussed in this paper were suggested in connection with a research conducted in St. Thomas's Hospital, London, by Professor MacLean on "The Intensive Alkaline Treatment of Gastric and Duodenal Ulcer." Professor MacLean's formula (*C. & D.*, 1929, I, 644) was subject to various modifications. It does not really claim originality, for powders of a somewhat similar kind have been prescribed and dispensed for many years for a similar purpose. The fact that in appearance and bulk the powder dispensed in one pharmacy differed considerably from that dispensed in another was found to be due to the one dispenser using creta præparata and the other calcii carbonas præcipitatus. At a branch meeting of the Society in Edinburgh (*C. & D.*, 1929, I, 606) Mr. Hall asked what should be dispensed for calcii carb. in the following prescription:—Calcii carb., sodii bicarb., magnes. carb. pond., aa 5j. The reply given was that in accordance with traditional practice in Scotland calcium carbonate for internal medicinal use should always be in the amorphous form of creta præparata, the crystalline character of calcii carbonas præcipitatus being objectionable as likely to cause irritation of the mucous membrane. This reply was met with the objection that the dispenser might be charged under the Sale of Food and Drugs Act or under the N.H.I. testing of prescriptions scheme, as the only substance called calcii carb. in the B.P. was the crystalline precipitated calcium carbonate. Dr. Dryerre supported the view that prepared chalk was the correct form of calcium carbonate to use, but undertook to ascertain from Professor MacLean himself what form he had actually used. He met Professor MacLean and learned that what he intended was creta præparata, and the chief dispenser confirmed that this was what had been invariably used at St. Thomas's Hospital. At a meeting in Manchester (*C. & D.*, November 16, 1929, p. 590) Mr. J. H. Franklin reported that in reply to an inquiry he had also been informed that Professor MacLean meant the amorphous calcium carbonate. Mr. Franklin says, "I do not suppose that there is much difference in the therapeutic action of the powder, whichever kind of chalk is used," and he quotes Professor MacLean as saying, "It really does not matter from the therapeutic point of view which preparation of chalk is used."

But there is another difficulty. Prepared chalk is much denser than precipitated chalk, hence a teaspoonful of a powder made with the former would be a larger dose than that of a powder made with the latter. Moreover, there are three commercial varieties of precipitated calcium carbonate known as light, medium and heavy. Bertholet has shown (U.S. Dispensatory, p. 251) that when precipitation is effected at 0° C. the product is a light, hydrated, almost amorphous powder having a density of 1.7; if precipitated at 30° C. the product consists of minute rhombohedra having a density of 2.7; with boiling solutions the precipitate consists of prismatic rhombohedra with a density of 2.9.

Authorities Consulted

So far as the Sale of Food and Drugs Act or the N.H.I. testing scheme is concerned, it is by no means clear that a dispenser who supplies creta præparata when calcii carb. is presented could be charged. The B.P. does not describe any substance as calcii carbonas. The name is calcii carbonas præcipitatus, and the inference is that there is another form of calcii carbonas. In Gray's Supplement (p. 627) we find "calcis carbonas, native carbonate of lime" and "calcis carbonas præcipitatum, precipitated carbonate of lime." We find also in Hager's "Handbuch der Pharmazeutischen Praxis" the synonym for creta præparata is calcium carbonicum nativum and the other carbonate of calcium is calcium carbonicum præcipitatum. In the B.P. creta præparata is called "native calcium carbonate" and the other is called "precipitated calcium carbonate." The U.S. Pharmacopœia says that creta preparata must contain not less than 97 per cent. of CaCO₃ and calcii carbonas præcipitatus must contain not less than 98 per cent. of CaCO₃. When, therefore, calcii carb. is prescribed a dispenser would be justified in dispensing either the native or the precipitated calcium carbonate.

The literature of calcii carbonas præcipitatus is interesting and somewhat contradictory. It seems to have come into the British Pharmacopœia by way of the Dublin Pharmacopœia, in which it appeared in 1826. Referring to its appearance, Christison "Dispensatory" (p. 230) says it "is an unnecessary article of the *materia medica*. It is nothing else than pure carbonate of lime finely divided, and as such has no advantage whatever over good chalk." On this same point the U.S. "Dispensatory" (p. 252) says, "for ordinary purposes it probably has no such superiority over prepared chalk as to counterbalance its greater expensiveness." "Neligan's Medicines" (p. 14), under "chalk mixture," says, "in its preparation prepared chalk is rightly preferred to precipitated chalk, inasmuch as the latter is apt to irritate the mucous membrane of the alimentary canal in consequence of its finely crystalline formation." So recent a book as Bentley's "Pharmacy" (p. 259), says in the same connection, "precipitated chalk might make a smoother preparation, but is inadmissible in a diarrhoea mixture on account of its micro-crystalline character." In Remington's "Pharmacy" (p. 676), a further argument in favour of native calcium carbonate or prepared chalk is introduced as follows:—"This is the form of chalk which is used in medicine almost exclusively, as it occurs in amorphous particles which have a greater adhesive property than precipitated calcium carbonate, which is crystalline." This "greater power of adhesion" is also noted in the U.S. "Dispensatory" (p. 391). All the authorities consulted confirm those quoted, and this consensus of opinion appears to be the ground for the traditional practice by which, for internal medicinal treatment, prepared chalk is always dispensed, when calcium carbonate is prescribed, unless the prescriber specifies calcii carb. præcip.

Text-Book Opinions

Speaking of precipitated calcium carbonate the B.P. Codex (p. 371) says: "for internal use the amorphous carbonate is often preferred. It is chiefly used as a basis for tooth-powders, its micro-crystalline character conferring advantages over native calcium carbonate for this purpose." This is a view very generally entertained, but when we turn to American authorities we find another opinion. In Remington's "Pharmacy" (p. 675) we find: "Precipitated chalk is largely used in tooth-powders and similar preparations; it must be very finely powdered or the crystalline particles would cause erosion upon the enamel of the teeth." In the U.S. "Dispensatory" (p. 252) it is said of calcii carbonas præcipitatus, "It is not so desirable for tooth-powder as chalk, because being in a crystalline state it is more liable to abrade the tooth enamel." Christison's view that it is a superfluous article of *materia medica* stands confirmed. When we are called to dispense MacLean's powder we know definitely what we should do. But the question is much wider than that. It applies to every case in which calcium carbonate without the distinguishing adjective "precipitated" is prescribed for medical treatment.

In the absence of clinical evidence to the contrary the traditional view stands.

Then followed a note on an

Incompatible Mixture : Potassium Citrate, Sodium Salicylate, Iodine and Nux Vomica

By J. RUTHERFORD HILL, PH.C.

[ABSTRACT]

ATTENTION was called by Mr. D. McEwan to the following mixture :—

Potass. cit.	...	...	...	3iiss.
Sod. salicyl.	...	...	...	3iiss.
Tinct. iodi mit.	...	...	m48	
Tinct. nucis vom.	...	...	...	3iiss.
Aquam	...	...	ad	3viij.

When the tincture of iodine was added to the sodium salicylate in solution, decolorisation after a time was complete, and there was a yellowish-white precipitate and a distinct odour of iodoform, and also a phenolic odour. When the tincture of iodine was added to a solution containing both the sodium salicylate and the potassium citrate, decolorisation was practically complete at once, with a relatively smaller quantity of the yellowish-white precipitate and the same iodoform and phenolic odour. On diluting the tincture of nux vomica with 8 oz. of water and adding the tincture of iodine there was an abundant reddish-brown precipitate, which at the end of a week had only slightly begun to settle out. This was probably the sparingly soluble strychnine periodide, $C_{21}H_{22}O_2N_2HI_2$, with some of the similar brucine compound. The mixture dispensed as written gave a brownish-yellow, easily diffusible precipitate, giving the mixture a muddy appearance. Adding the tincture of iodine and the tincture of nux vomica first to the water and then the other ingredients gave more precipitate of a deeper brownish-yellow colour and a muddy mixture. Adding the iodine, citrate and salicylate first, allowing them to react and then adding the tincture of nux vomica, there was a yellowish precipitate, which soon separated completely, leaving a clear colourless supernatant liquid. The mixture dispensed, omitting the potassium citrate and nux vomica, slowly gave a water-white solution and a whitish precipitate, with an odour of iodoform and phenol. The mixture dispensed, omitting the nux vomica but including the potassium citrate, gave at once a water-white solution with a relatively smaller quantity of the whitish precipitate and the same iodoform and phenol odour. It will be seen, therefore, that the actual constitution and appearance of the mixture may depend on the order in which the ingredients are added.

The mixture recalled a very similar case of incompatibility reported at an evening meeting here in 1916. The mixture on that occasion was as follows : Tinct. iodi 3vj., liq. potasse 3vj., ammon. carb. 3iij., sodii salicyl. 3ij., aquam. ad. 3xx. By chance the actual mixture as dispensed on that occasion is still in the laboratory. It will be found it still has the characteristic iodoform and phenolic odour. The colour is due to the well-known reaction between ammonia and sodium salicylate. The new element in the mixture now under consideration is the presence of nux vomica and the precipitation of the alkaloids strychnine and brucine by the iodine. In the previous instance quoted above it was shown that when tincture of iodine and an aqueous solution of potassium or sodium oxalate, acetate, tartrate, citrate, benzoate or salicylate are mixed free iodine disappears with formation of potassium or sodium iodide and iodate. There is at the same time formed potassium or sodium hypoidite, which reacts with the alcohol of the tincture of iodine to form iodoform and potassium or sodium formate and iodide. In the case of all organic alkali salts in aqueous solution the alkali ions are sufficiently dissociated to enable them to react with the iodine to form hypoidite of the alkali. The presence of the potassium citrate appears to hasten this reaction, and hence the almost immediate decolorisation of the solution. This explains the odour of iodoform. As indicated in 1916, the phenolic odour is distinctly reminiscent of Freyer's method for the volumetric estimation of sodium salicylate in which bromine is used. Substituting iodine for bromine gives the reaction :—



The HI reacts with another portion of the sodium salicylate, giving NaI and free H_2CO_3 found in the precipitate along with the tri-iodophenolic compound, to which the phenolic odour is due. The precipitate, therefore, appears to consist of an iodo-alkaloidal compound, a phenolic compound and some free salicylic acid. The prescription has been several times dispensed. The patient suffers from rheumatism, in the treatment of which he says it has been very successful.

DISCUSSION

The CHAIRMAN said he had dispensed large quantities of MacLean's powder recently and he had invariably dispensed precipitated chalk under the impression that this was what was intended by calcium carbonate. He thought Mr. Hill had made out a very good case for the use of prepared chalk. At any rate, he had made it quite clear that that was what was intended by Professor MacLean.

Mr. D. HARLEY said this powder was very familiar at the dispensing counter as a routine treatment for cases of gastric illness. All through his experience he had been taught that for internal medicinal use calcium carbonate in the form of prepared chalk should always be employed, the objection to precipitated chalks being its crystalline form.

Mr. HALL said he had no doubt creta preparata was the proper substance to use. At any rate, in all his experience that had been the rule that where the medicine was for internal use carbonate of lime should always be in the form of creta preparata.

Mr. KELLY said it was eminently desirable that they should reach some uniform practice in regard to the matter. Having been trained in Edinburgh, he had always been taught that creta preparata was the proper form of calcium carbonate for all internal medicines. It might be that where an antacid action was wanted the crystalline calcium carbonate might better answer the purpose.

Mr. TODD said, speaking for the practice in the West of Scotland, his experience had been that prepared chalk was always dispensed for calcium carbonate for internal medicinal use. In the treatment of duodenal ulcers he understood it was necessary to maintain alkalinity in the contents of the duodenum, and this might be more rapidly attained by the use of the crystalline calcium carbonate than by the use of prepared chalk.

Mr. CURRIE said that, speaking from experience, he did not think there was much difference in therapeutic action between the amorphous calcium carbonate and the crystalline calcium carbonate. It was very desirable that they should all be doing the same thing.

Mr. PERRINS said it was a little late in the day to have a dictum as to what should be used. On a therapeutic point it was better to be guided by the medical practitioner who knew the patient and all the circumstances.

Mr. KAY said that he had dispensed MacLean's powder very frequently. An important point was the relative bulk of the powder. Obviously the dosage of the ingredients would be very considerably affected.

Mr. HILL, replying, said this last point was important. There were in commerce three grades of precipitated chalk—light, medium and heavy. This meant that even if they used precipitated chalk the bulk would depend on the variety employed. There was no such variation in the case of prepared chalk, so that the powder would always be uniform in consistence and dosage. The old tradition had been in Scotland invariably to use amorphous calcium carbonate for internal medicinal use unless the prescriber particularly specified that the crystalline precipitated chalk was what he intended. The interesting point had been made as to the difference between the use of calcium carbonate for allaying inflammatory conditions of the mucous membrane and the use of calcium carbonate to neutralise acidity. That seemed to be a point requiring fuller consideration on the part of medical practitioners, who alone could claim any authority on a therapeutic matter of this kind. It would be interesting to know if there was substantial grounds for the view that crystalline calcium carbonate was preferable in cases of neutralising of acidity while amorphous calcium carbonate was preferable in cases of inflammatory or irritated conditions of the mucous membrane.

Corner for Students

Conducted by Leonard Dobbins, Ph.D.

Communications should be addressed "Corner for Students,
The Chemist and Druggist," 42 Cannon Street, London, E.C.4."

(Concluded from C. & D., February 8, p. 169.)

Report on the January Analytical Exercise

MARKS AWARDED FOR ANALYSES

<i>1. Correspondents who have not passed in Chemistry:</i>			
M. W. Niven	88	Scrophulariacæ	74
H. Seymour	82	Tut	72
Bob	76	The Philosopher	70
Verdad	75	Kudos	69
Foy	74	No. 53	49
<i>2. Correspondents who have passed in Chemistry:</i>			
Succus scoparii	88	Zymin	77
Jacko	82	Aristotle	66
Arduus ad	81	Celtium	63
Mullard	81	Aldehyde	51
Rami	77	Jock	45

To CORRESPONDENTS

M. W. NIVEN.—Note that sulphite would not remain unoxidised along with chromate in an acid solution; sulphate and chromic salt would be formed.

H. SEYMOUR, ZYMIN AND OTHERS.—Read the paragraph relating to the detection of potassium in the general remarks upon the December exercise.

BOB.—In applying a test to ascertain whether chromium was present as chromate or chromic salt you overlooked the fact that the solution to which you added silver nitrate was prepared by dissolving the powder in hydrochloric acid; under the circumstances the formation of a precipitate of silver chloride was inevitable.

VERDAD.—As a bichromate was present the routine treatment of the original solution in hydrochloric acid with hydrogen sulphide was certain to produce a chromic salt, and indications of chromium should have been observed in the iron group.

FOY.—Beware of assuming, without having attempted to test the matter, that no part of a copper-arsenic group precipitate is dissolved by solution of sodium hydroxide, because it is not dissolved completely. This, as well as various kindred assumptions, is responsible for many mistakes. Read also the reply to M. W. Niven.

SCROPHULARIACEÆ.—Read what is stated concerning the detection of the sulphuric acid radical in the general remarks upon the October 1929 exercise, and examine the matter experimentally in the laboratory. The trace of a chloride present was much too minute to be recognisable by the tests you employed as confirmatory. See also the reply to "Verdad."

TUT.—The hydrogen sulphide precipitate should have been examined for all the metals of the copper group; it was not enough to prove merely that it contained cupric sulphide. The iron group precipitate was not white, and it consisted of chromic hydroxide.

THE PHILOSOPHER.—Some confusion, which we are unable to unravel, seems to have arisen in your testing for acidic radicals by means of silver nitrate. There was no main constituent present which could give reactions resembling those of a bromide. Your name has been transferred to the list of students who have not passed in Chemistry in the Licence Examination.

NO. 53.—Testing the hydrogen sulphide precipitate for members of the arsenic group should not have been omitted.

SUCCUS SCOPARII.—The precipitate yielded by an arsenate in interaction with ammonium molybdate should not be pale yellow; a pale precipitate probably consisted of molybdic anhydride, which should not be obtained if an appropriate molybdate solution is used.

ARDUUS AD.—Read the second sentence of the reply to "Tut."

JACKO.—The effervescence when the powder was treated with an acid was not conspicuous, but still

it ought not to have escaped close observation. Yours was the only attempt reported to distinguish between bichromate and chromate.

CELTIUM.—The evidence you give for the presence of a trace of mercury is quite unconvincing.

ALDEHYDE.—The summary of constituents found should not have been omitted.

JOCK.—You have made serious slips in connection with the copper, iron and barium groups, as also with acidic radicals, and we recommend thorough revision of these.

For New Business

By a Business Consultant

1—The Importance of Sales

SALES are the life-blood of a business. Although it is important to have a varied stock in good condition, to purchase in the best market, to dispense accurately and to manage economically, these alone are not sufficient. Unless there is a good volume of sales, all other factors are useless. It is one of the peculiarities of the trade that a man may be an excellent pharmacist, and yet be unable to obtain more than a mere existence from his business. The essential factor is the ability to build up the turnover figure; pharmacy alone will not break records.

The pharmacist in business is usually overburdened with petty details. He often attends personally to the most trivial matters, under the impression that he is thereby keeping his finger on every section of the concern. There are people who are so gifted that they can deal with details and yet keep an eye on the larger and wider developments which must be kept in mind if the business is to make progress; but these are exceptional. If the ordinary man has his working day fully occupied with routine work he is likely to be mentally, if not physically, exhausted before closing time arrives; he is then not in a fit state to plan ahead nor to think out new schemes for stimulating sales. The man who is reaching out for new business, therefore, will first of all avoid complete absorption in routine work. He will set aside a portion of the day to be devoted to reaching out for new business. The principal should take it as his all-important duty to concentrate upon increasing the turnover; any and every avenue which may lead to larger sales should be explored.

The principal must endeavour to increase the standing of his business locally. He may bring to the notice of parents the necessity of caring for children's teeth. He may offer a prize for the best essay by a child of ten years or under on the subject. "Why I brush my teeth night and morning," each entry to be accompanied by a cash sale receipt for an article valued at 2s. or more. The judge may be a local schoolmaster, or the master of English in a secondary school nearby, or the visiting dentist to the school. If properly organised, the manufacturer or wholesaler might help in the competition by presenting one or more prizes, and there might be a competition once a month on some subject in which the pharmacist and the parent are both interested. The suggestion can be varied to almost any extent, and within a month or two the business would feel the benefit of the publicity obtained thereby. In a similar way prizes might be offered—with the help of manufacturers—to amateur photographic clubs; to housewives in connection with the disinfectants in the home; and to ambulance and first-aid societies in connection with the elementary points of first aid.

REGULAR CUSTOMERS.—"The Lancet," in a recent issue, relates the following: "It is recorded that one, Samuel Jessop, who died at the age of sixty-five, in the year 1817, had such an inordinate craving for physic that in twenty-one years he took no less than 226,934 pills, besides 40,000 bottles of mixture; and in 1814, when his appetite increased, his consumption of pills was 51,590." Commenting on this, Sir William Hale-White adds that he once saw a patient who took so much medicine that the chemist called every day for orders."

Trade Report

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling, packing, etc. Qualities of chemicals, drugs, essential and fixed oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities.

42 Cannon Street, E.C.4, February 13

IN view of the disappointing trade conditions that were again experienced during the past year, the poor showing of the Board of Trade Returns for January caused no surprise, the decrease in total exports representing over $8\frac{1}{2}$ millions sterling compared with January 1929. The only encouraging item disclosed is the heavy increase of almost $1\frac{1}{4}$ millions sterling in coal exports, in contrast to large decreases in other big industries, especially textiles, iron and steel. It is to be hoped that with cheaper money well assured, that general trade will derive some benefit, although Budget uncertainties are having a restraining effect. There have been a number of fluctuations in values of commodities, with sugar improving at first, and subsequently reacting on a dull demand, which induced renewed concessions by refiners despite less favourable crops news from the Continent and Java. Rubber was higher on speculative buying, induced by expectations of reduced shipments despite further increased London stocks. Shellac fell sharply to comparatively low figures under depressing tactics, but rallied considerably, helped by a more active trade demand. In crude drugs little of interest has transpired. Cascara sagrada remains firm and in upward tendency. Kordofan acacia is quiet, with spot and near positions firm. Agar-agar is lower. Morocco cumin seed on the spot is cheaper, while coriander is dearer both on the spot and to arrive. Belladonna leaves are higher. Cod-liver oil commands interest in view of the new Lofoten fishing. In essential oils, Sicilian lemon is weaker, but orange is firmer. Bourbon geranium is easier, and slightly more interest has been shown in Java citronella at unchanged prices. Most quarters report quiet markets in the pharmaceutical chemicals group, but prices are maintained almost without exception. Methyl salicylate is in fair demand at the new prices. Cream of tartar is fairly steady, while citric and tartaric acids are flat. Barbitone and hexamine are unsteady; prices of phenacetin powder have been increased by $1\frac{1}{2}$ d. per lb. Among industrial chemicals the demand is a fair average, but apparently not so brisk as it was a month ago. There are no price movements of importance. Supplies of carbolic acid crystals are not now so short, but there is not likely to be any break in price; cresylic acid is inclined to weaken. In the fixed oil group the advance in linseed oil is an outstanding feature. Turpentine at one period showed a sharp recovery, which was subsequently lost. Acid oils, cotton, ground nut, palm and rapo are cheaper to buy. Hankow wood is dull and easier.

Higher	Firmer	Easier	Lower
Belladonna leaves	Bergamot oil	Acid oils	Agar agar
Cascara sagrada	Orange oil	Ground nut oil	Antimony, reg. (c.i.f.)
Coriander seed (Mor. spot and c.i.f.)		Lemon oil	Cotton oils
Linseed oil		Men oil	Cumin seed
Phenacetin (powder)		Palm oil	(Mor. spot)
		Rape oil	Shellac
			Woo oil (Hankow)

Cablegram

BERGEN, February 12.—The total catch of cod since the opening of the season amounts to 13,850,000, against 16,600,000 last year, and the yield of steam-refined non-freezing medicinal oil is 6,381 hectolitres, against 7,907 hectolitres at the corresponding period of last year.

Crude Drugs, etc.

AGAR-AGAR is cheaper, Kobe No. 1 offering at 4s. per lb. on the spot and No. 2 at 3s. 10d. Kobe No. 1 has been sold at 3s. 5d., c.i.f., and Kobe No. 2 at 3s. 3d. c.i.f.; also Yokohama No. 1 at 3s. 1d. c.i.f.

ATOES.—Curaçao in cases is quoted at 110s. per cwt. c.i.f. for t.q. The spot price varies according to quality: for black 115s., and for good livery 130s. spot is quoted.

ANTIMONY.—There has not been much business actually done in Chinese regulus, but fair interest is being shown by consumers for spot lots, which are quoted at about £31 5s. to £31 10s. per ton. There is practically no interest in forward shipment, and c.i.f. terms have been dropped to about £26 15s. English high-grade refined is £50 to £50 10s., and ordinary brands vary down to about £42 10s. Chinese crude, spot, is quite nominal at £26, while it is probable that business could be done at well under that figure. Chinese white oxide is about £34 10s.

BELLADONNA LEAVES are dearer at 6s. c.i.f. Belladonna root is in little demand and is unchanged.

BENZINO.—The landings in London during January amounted to 65 and the deliveries to 119, leaving a stock of 392 against 568 in 1929 and 695 in 1928.

BISMUTH.—The Syndicate's price is still pegged at 7s. 6d. per lb. for at least five-cwt. lots, but business thereat is slow, while it is reported that purchases can be effected from outside sources at considerably under that figure.

CADMUM.—Available supplies are undoubtedly well controlled between the leading interests handling either Canadian or Australian metal, and the market is firm at 3s. 11d. to 4s. per lb.

CALUMBA.—The landings during January were nil and the deliveries 161, leaving a stock of 408 (corrected by inspection), against 628 last year and 1,138 in 1928.

CARDAMOMS.—An auction of 25 packages Mangalore will be held on Thursday, February 13.

A central Cardamom Association for the purpose of affording facilities in the marketing of the cardamom crop is being organised in the State of Mysore, and draft rules for the working of the Association are reported to be under compilation.

CASCARA SAGRADA.—The c.i.f. value is about 67s. 6d. The spot price for 1924 peel is 75s. per cwt., and for 1927 peels 72s. 6d. per cwt. The market is very strong and supplies are rather short.

The deliveries during January amounted to 26 tons, the landings being nil. The stock at the end of January was 109 tons, against 281 tons in 1929 and 283 tons in 1928.

CLOVES.—Zanzibar are steady, with spot sellers at 9 $\frac{1}{2}$ d. per lb., and January-March shipment at 8 $\frac{1}{2}$ d. c.i.f.

The landings in London during the week ending February 8 amounted to 50 and the deliveries to 44, leaving a stock of 1,480, against 2,373 in 1929 and 11,553 bales in 1928. The landings in London (January 1 to February 8) amount to 1,465, against 1,067 in 1929, and the deliveries 783, against 1,193 in 1929.

COD-LIVER OIL.—The first official figures in regard to the Lofoten catch are given in our cablegram, and are none too good, owing to stormy weather. There is a fair demand, with agents quoting finest new non-freezing medicinal oil at from 105s. to 107s. per barrel, c.i.f. London.

DRAGON'S BLOOD.—Eight cases have arrived per "Rajputana" from Penang.

GUM ACACIA.—With buyers holding off, the market has been very quiet. Kordofan cleaned on the spot is 100s. per cwt. afloat 90s. and February-March shipment 87s. 6d. c.i.f. Natural sorts is 95s. spot, 85s. afloat, and 82s. 6d. c.i.f. for February-March shipment. Talha is 50s. spot and 38s. c.i.f. for shipment.

The landings of all descriptions of acacia in London during January amounted to 1,579 packages, and the deliveries to 1,221, leaving a stock of 2,616, against 4,015 in 1929 and 6,648 in 1928.

HYDRASTIS is quoted on the spot at 11s. per lb., and to come forward at 10s. 6d. c.i.f. Prices may advance still further, as they have been at too low a level, taking into account the cost of production.

IPECACUANHA.—The landings during January were ten Matto Grosso and the deliveries three, leaving a stock of 250 against 61 last year. There were no movements in other descriptions.

MAGNESIUM is steady and a moderate demand, with prices of home makers standing at 3s. 3d. to 3s. 9d. for small sticks and bars, while ribbon sells at 11s. to 14s., wire at 7s. 6d. to 12s. 6d., and powder at 4s. 6d. up to 7s. 6d. per lb., according to specification.

MENTHOL is slightly easier, Kobayashi-Suzuki offering on the spot at 14s. 6d. per lb., and for February-March shipment 13s. 7 $\frac{1}{2}$ d. c.i.f. is quoted.

MERCURY.—The market has been quite colourless and the home trade demand is still somewhat spasmodic, being confined to small lots on the spot. Consumers are probably not well covered, but there seems to be a feeling that prices will remain about where they stand for some time. There is certainly no fear of any shortage, while fairly regular consignments have been coming along from controlled sources.

The terms quoted by the agents of the Combino stand at £22 5s. net for up to ten bottles, and £22 2s. 6d. net for upward of 11 bottles, while f.o.b. terms for shipment for orders of 25 bottles and upwards are £21 15s. net. In the open market quotations are called about £23 to £23 2s. 6d. per bottle, less the customary discount.

PEPPER has been quiet but firmer at the close; fair black Singapore is now 1s. 0½d. per lb. on the spot; January-March shipment is 1s. 0¾d. c.i.f.; Lampung is 1s. 0½d. spot. To arrive, the sales include January-March at from 1s. to 1s. 0½d. to 1s. 0¾d., and March-May at from 1s. 0¾d. to 1s. 1½d. c.i.f. Tellicherry is 1s. 1d. spot and February-April shipment 12s. c.i.f. (12s. paid). Alloony is 1s. 1½d. spot and February-March shipment is 12s. buyers (12s. paid), c.i.f. White Muntok is firmer at 1s. 5d. spot. To arrive, the market is firmer; the sales include January-March shipment at 1s. 4½d. to 1s. 4¾d., March-May at 1s. 4½d. to 1s. 5d. to 1s. 4¾d. c.i.f.

PIMENTO is quiet at 9½d. per lb. on the spot, and for March-April shipment sellers quote 80s. per cwt. c.i.f.

PODOPHYLLUM ROOT.—*Podophyllum emodi* is quoted at 34s. c.i.f. and on the spot at 37s. to 38s. per cwt.

RHUBARB.—Bold round Shensi with fine pinky fracture is scarce at from 4s. 2d. to 4s. 3d.; rough round high-dried of good pinky fracture is worth 1s. 8d., and flat high-dried is 1s. 11d. to 2s. as to fracture. The landings in London during January were 46 chests and the deliveries 27, leaving a stock of 280, against 232 last year.

RUBBER has considerably improved since our last, and is fully 2d. per lb. better on the week. The negotiations between the British and Dutch importers have now taken a definite step, and we understand that there has been an agreement between the two bodies on the main points at issue. It should, however, be clearly understood that these negotiations are merely private, and whilst certain hopes are entertained, so far nothing official has been published. Meanwhile the market is very sensitive, and the increase in price is mainly due to covering by nervous "bear" operators. Arrivals last week totalled 2,710 tons, whilst deliveries were 1,688 tons, showing a further increase of 1,022 tons in the stocks. The London stock now stands at 61,482 tons, against 25,413 tons at the corresponding period last year. The Liverpool stock now stands at 19,761 tons. Quotations (Wednesday, 5 p.m.): No. 1 standard ribbed smoked sheet, spot and February, 8d.; March, 8½d.; April-June, 8½d.; July-September, 8½d.; October-December, 8½d. per lb.

SAFFRON is unchanged, and according to quality 42s. 6d. to 45s. per lb. is quoted.

SARSAPARILLA.—The landings in London during January were 30 and the deliveries 16, leaving a stock of 102 bales, against 87 last year. Arrivals comprise 25 bales native Jamaica per "Jamaica Merchant."

SEEDS.—ANISE.—Spanish is 65s. and Russian 31s. 6d. per cwt. on the spot. CANARY.—Market is quiet and unchanged. Mazagan of old crop is 28s. 6d., and new crop 27s. 6d. per cwt. on the spot. Morocco (f.a.q. 4 per cent.) is 26s. 6d. spot, and February-March shipment is still quoted at 25s. 6d. c.i.f. Dutch is now offering on spot at 18s. CUMIN.—Malta is 70s. spot with business done, and for shipment 65s. c.i.f. is quoted. Morocco on spot is cheaper at 60s., and for shipment the price is unchanged at 58s. c.i.f. FENUGREEK.—Morocco is quiet at 19s. spot, and for shipment offers are being made at 16s. c.i.f. with no business passing. CORIANDER for shipment is dearer at 8s. 3d. per cwt. c.i.f. The spot price has now moved from 7s. to 8s. per cwt. MUSTARD.—English remains at from 27s. 6d. to 32s. per cwt., according to quality. CARAWAY.—Dutch on the spot is now 36s., and f.o.b. Rotterdam is 34s. 6d. per cwt.

SENEGA.—Price on spot is from 3s. 10d. to 3s. 11d. per lb., and to arrive 3s. 9d. c.i.f. is quoted.

Senna.—Good bold green Alexandrian pods to come forward are offered at 4s. 6d. per lb.; this quality is scarce on the spot at from 4s. 6d. to 5s., the bulk of the offerings being poor quality. The landings of senna in London during January amounted to 398 and the deliveries to 220, leaving a stock of 2,294, against 1,527 in 1929 and 2,067 in 1928.

SHELLAC is much lower owing to "bear" manipulation and liquidation. The spot market for usual standard TN orange quality closed last week at a decline of 5s. per cwt., followed by one of 10s. on Monday, the quotation that day being 127s. 6d. per cwt., with a recovery to 132s. 6d. by Wednesday. Fine orange is 170s. to 270s.; pure button, 190s., and AC cakey 170s. The arrival market has also declined by about 15s., with sales of February-March at 112s. to 118s. c.i.f.; March-April at 115s. to 119s., and April-May at 116s. to 121s. c.i.f. Futures are also lower, the sales including TN for March at 132s. to 124s. to 114s. (closing 122s.

buyers). May at 134s. to 119s. to 126s., and August 139s. to 122s. 6d. to 130s.

The following figures show the shipments from Calcutta and the destinations during January 1930, also totals since November 1, 1929, to January 31, 1930, compared with the corresponding period of 1929:—

	Other				
	U.K.	Countries	U.S.A.	Countries	Total
	cwt.	cwt.	cwt.	cwt.	cwt.
January 1930	10,849	9,690	19,661	4,470	44,670
Nov. 1, 1929-Jan. 31, 1929	42,737	29,010	77,970	13,500	163,217
Nov. 1, 1929-Jan. 31, 1930	42,656	31,561	54,526	12,649	141,392

The above figures show a total reduction of 21,825 cwt. for the three months; shipments to United Kingdom were maintained, the Continental figures increased by 2,551 cwt., but the U.S.A. declined by 23,444 cwt. London deliveries for January were very heavy at 8,798 cases, which against the large arrivals of 8,461 cases made a decrease in the stocks of 337 cases to 25,467 cases, against 18,244 cases a year ago.

TRAGACANTH.—The landings during January were 1,544 packages and the deliveries 791, leaving a stock of 11,355, against 9,108 in 1929 and 6,908 in 1928.

TURMERIC.—Madras finger is quoted at 32s. 6d. per cwt. on the spot and at 29s. c.i.f. Cochin split bulbs are unobtainable on the spot.

Essential Oils

STAR ANISE has been more in demand. Cassia and Japanese dementholised mint are inactive. The Sicilian citrus oils are weaker except orange, which keeps firm. California citrus oils are unchanged.

ANISE (STAR) is in slightly better demand, though there are no price alterations to record, leads offering at 3s. 10d. and fine in cases at 3s. 9d. per lb. on the spot. The position remains unchanged. A small c.i.f. business has been done at 3s. 5d. per lb. for leads in cases. There are no first-hand offers for "Red Ship" from Hong-Kong and shippers are asking for an extension of time in regard to December-January shipments, pleading *force majeure*.

BERGAMOT is rather weaker at from 11s. 6d. to 11s. 9d. per lb. c.i.f. for 38-40 per cent. l.a. The spot value varies according to seller at from 11s. 6d. to 12s. per lb. The recent sharp advance is thought to be due to a rumour of the proposed formation of a co-operative organisation which would operate with bergamot oil on the same lines as the Camera Agrumaria does with citrate of lime. It is the opinion in some quarters that such a scheme would be impracticable, as the quality of the oil would be impaired after a period of storage of, say, one year or longer, and would thus be detrimental to its use.

BOIS DE ROSE.—Cayenne is 6s. 6d. per lb. spot and Brazil is quoted at about 5s. per lb. spot, with some cheap oil offering at 7s. per kilo c.i.f.

CAJUPUT for bottles in cases is quoted at 2s. 9½d. per lb. spot.

CASSIA is inactive at 4s. per lb. spot and 3s. 8d. to 3s. 9d. per lb. c.i.f. for shipment for 80-85 per cent. c.a.

CEDARWOOD to arrive is quoted at 1s. 1d. per lb. c.i.f. in drums. The spot value is 1s. 3d. per lb. in drums and 1s. 4½d. per lb. in tins.

CITRONELLA has shown some slight activity during the past week and the spot value for Java is about 2s. 6d. per lb. and to come forward at 2s. 3½d. to 2s. 4d. per lb. c.i.f. Ceylon is quoted at 2s. 3d. per lb. on the spot and at 2s. 2d. per lb. c.i.f. to arrive.

GERANIUM.—Bourbon is weaker at about 16s. per lb. spot and for shipment at 15s. 3d. per lb. c.i.f. Prices for African are rather lower at from 17s. 6d. to 18s. per lb. spot and at from 16s. to 17s. per lb. c.i.f.

GINGERGRASS is inactive at 8s. per lb. spot and 7s. 6d. per lb. c.i.f. to arrive.

LEMON is distinctly lower and the outlook is uncertain owing to the unexpected low prices received for lemons in cases in the United States, Germany and in this country. Should this persist the market might recede further. Shippers in Messina are rather panicky owing to the bad market for fruit, and the majority of producers have scarcely realised the cost of the wooden cases in which the fruit is packed. Fruit previously held up for higher prices might possibly be released, and the probability is that all citrus products will undergo a further reduction in price. Values for oil vary; 4s. 6d. per lb. c.i.f. is quoted for machine-made and from 5s. 6d. to 7s. per lb. c.i.f. for hand-pressed, according to quality. The spot prices vary according to seller, from 6s. 3d. to 7s. 3d. per lb. as to quality and brand. The mixing of machine-pressed with hand-pressed oils is prevalent at the source, and such parcels are offered at a wide range of prices, dependent on quality. As the bulk of shippers appear to adopt this practice the buyer has little choice and has to exercise his own judgment.

LEMONGRASS is quoted at 2s. 8d. to 2s. 9d. per lb. c.i.f. and 2s. 10d. spot for 85 per cent. citral.

ORANGE.—Sweet Sicilian is slightly higher at 12s. 3d. per lb. on the spot and at 11s. 9d. c.i.f. West Indian is nominal in the absence of business at 10s. spot and 9s. c.i.f. The Jamaica crop has not been so large as expected and stocks left on the Island are of negligible proportions. The value at which business could be done is put at 10s. per lb. c.i.f., but higher values may be expected.

PALMAROSA is quoted on the spot at 10s. 9d. per lb., and for shipment at from 9s. 6d. to 10s. 6d. per lb. c.i.f. according to test.

PEPPERMINT.—Japanese dementhrolised is easy at from 4s. 9d. to 5s. per lb. on the spot for Kobayashi-Suzuki, and for February-March shipment 4s. 4d. c.i.f. is quoted. American natural tin oil is quoted at from 14s. to 14s. 3d. per lb. spot, according to quantity, in drums, and at 14s. 6d. per lb. in tins. Drums to come forward are quoted at 13s. 6d. per lb. c.i.f.

SASSAFRAS.—Genuine natural is quoted at from 5s. to 5s. 3d. per lb. spot according to seller, and at 4s. 9d. per lb. c.i.f.

SPERMINT is fairly firm on the spot, and is quoted according to brand and seller at from 19s. 9d. to 20s. 6d. per lb. spot, and to come forward at 19s. 6d. per lb.

SPIKE.—Stocks of the finest quality of Spanish spike lavender in producers' hands are considerably short at the moment, and consequent upon any increased demand an upward movement is to be feared.

WORMSEED (CHENOPODIUM) shows a range of prices according to seller. The average spot price quoted is about 14s. 6d. per lb., while the c.i.f. price is quoted at from 15s. to 15s. 6d. per lb. The position in New York seems to be steady and prices are maintained without pressure to sell.

The following arrivals have taken place from the countries indicated during the period February 5 to February 11 (inclusive): Almond (Fr.) 22 cs.; bay (B.W.I.) 20 cs.; bergamot (It.) 30 cs.; cananga (Java) 4 dm.; caraway (Neth.) 1 cs.; cassia (H.K.) 5 os.; citronella (Java) 4 dm.; clove (Fr.) 3 dm., (Ger.) 2 dm.; juniper (Ger.) 1 dm.; lavender (Sp.) 3 dm.; lemon (It.) 100 cs., (U.S.) 2 dm.; mace (Fr.) 1 cs.; orange (It.) 12 cs., (Jam.) 31 cs.; palmarosa (Br. India) 2 cs.; peppermint (Jap.) 50 cs.; rose (Fr.) 1 cs.; rosewood (Fr.) 1 dm.; sandalwood (Trin.) 2 cs.; spike (Sp.) 3 dm.; undescribed (It.) 30 dm., (Fr.) 6 cs.

Pharmaceutical Chemicals, etc.

RATHER quiet markets are reported from most quarters, but this slight falling off in the demand has not in the least affected the steady tone of the market. Prices are maintained almost without exception. The price of phenacetin powder has been revised, which brings it to the level of crystals.

ACETANILIDE is unchanged and slow of sale: B.P. crystals and powder, 1s. 4 $\frac{1}{2}$ d. to 1s. 6d. per lb. as to quantity.

AMIDOPYRIN continues at the controlled prices on spot, but there is little business moving: half-ton lots, 12s. 6 $\frac{1}{2}$ d.; two cwt., 13s. 0 $\frac{1}{2}$ d.; less than two cwt., 13s. 3 $\frac{1}{2}$ d. per lb.

ASPIRIN is unchanged at the agreed prices of 2s. 9d. to 2s. 11d. per lb. as to quantity; market has been rather quieter of late.

BARBITONE continues unsteady, but controlled prices are holding at 7s. 3d. to 8s. per lb. as to quantity; some offers may be slightly cheaper; business is slow.

BENZOIC ACID (B.P.) is steady and inquiry is fair: quantities, ex works, 2s. 0 $\frac{1}{2}$ d.; spot parcels, 2s. 1d. to 2s. 2d. per lb. ex store.

BENZONAPHTHOL remains slow of sale, with dealers offering on spot at about 2s. 10d. to 3s. per lb.

BROMIDES.—The position shows little change on the week. Competition is the chief feature and quoted prices are of little guide where business of any size is concerned: dealers quote ammonium, 1s. 9 $\frac{1}{2}$ d.; potassium, B.P. crystals, 1s. 5d. to 1s. 5 $\frac{1}{2}$ d.; granular, from 1s. 5d.; sodium, B.P., about 1s. 8 $\frac{1}{2}$ d. per lb. as to quantity. Home makers' list prices are as follows: ammonium, 2s.; potassium, B.P. granular, 1s. 7 $\frac{1}{2}$ d.; crystals, 1s. 8d.; sodium, B.P., 1s. 11d. per lb., but these prices would only obtain for small lots. Merchants' and makers' prices for actual business are about level.

CALCIUM LACTATE is steady but dull: quantities from 1s. 1 $\frac{1}{2}$ d. to 1s. 3d. per lb. for small parcels.

CHLORAL HYDRATE is very steady as quoted by home makers at 3s. 1d. to 3s. 3d. per lb. for duty-paid crystals; foreign on spot, 3s. 6d. per lb.

CITRIC ACID (B.P. crystals).—Business has been slow and difficult: foreign on spot, with home make, is at about

1s. 10 $\frac{1}{2}$ d. per lb., less 5 per cent., for quantities; foreign to arrive is offered at 1s. 10 $\frac{1}{2}$ d. per lb., less 5 per cent.

CREAM OF TARTAR is now fairly steady and business is sustained on a limited scale: foreign on spot is 10s. 6d. to 10s. 6d. per cwt., less 2 $\frac{1}{2}$ per cent.; home make is quoted at 10s., less 2 $\frac{1}{2}$ per cent.

CREOSOTE (B.P.) continues quiet, with dealers offering on spot at 1s. 8d. to 1s. 9d. per lb.

CREOSOTE CARBONATE is unchanged on a slow market: spot, about 5s. 8d. to 6s. per lb.

GUAIACOL CARBONATE is steady on a quiet market at 4s. 6d. to 4s. 10d. per lb.

HEXAMINE.—While spot is available in quantities at 1s. 11d. to 2s. 1d. per lb., Convention prices are being maintained at 2s. 2 $\frac{1}{2}$ d. to 2s. 4d. per lb. as to quantity.

HYDROQUINONE continues steady, with a fair inquiry: 3s. 7 $\frac{1}{2}$ d. to 3s. 11d. per lb. as to quantity.

METHYL SALICYLATE (B.P.) is holding at the home makers' prices of 1s. 3d. for three-ton lots minimum upwards, up to 1s. 5d. per lb. for small parcels.

METHYL SULPHONAL continues steady on a slow market at 12s. 7d. to 13s. 10d. per lb. as to quantity.

MILK SUGAR is unchanged, with Continental selling at about 52s. per cwt. ex store.

PARAFORMALDEHYDE is steady at 1s. 7d. for quantities in kegs and up to 1s. 8d. per lb. for small lots of 100 per cent. powder.

PARALDEHYDE is quiet and prices are keen: quoted from 1s. 1d. to 1s. 4d. per lb. as to quantity and packing.

PHENACETIN.—There has been a slight adjustment here: crystals, two cwt., 3s. 9 $\frac{1}{2}$ d. and up to 3s. 11d. per lb. for small parcels; powder is now 1 $\frac{1}{2}$ d. per lb. more.

PHENAZONE is steady but quiet: two cwt., 7s. 2d.; smaller parcels, 7s. 3 $\frac{1}{2}$ d. per lb.

PHENOLPHTHALEIN is steady and in occasional demand: quoted from 5s. 11d. to 6s. 1 $\frac{1}{2}$ d. per lb. as to quantity.

POTASSIUM PERMANGANATE (B.P.) is unchanged, with quantities in drums at 52d. and druggists' parcels from 6d. per lb.

POTASSIUM SULPHOGUAIACOLATE remains slow of sale: spot is from about 3s. 6d. per lb.

RESORCIN continues steady but quiet: quoted from 2s. 11d. to 3s. 2d. per lb. as to quantity.

SALICYLIC ACID (B.P.) is holding very steady at home makers' prices of 1s. 5d. to 1s. 7d. per lb. as to quantity.

SALOL remains quiet, but prices are unchanged: 3s. 7 $\frac{1}{2}$ d. to 3s. 10d. per lb. as to quantity.

SODIUM DIETHYLBARBITURATE is a poor market: spot is about 10s. per lb.; f.o.b. Continent, five cwt., 9s. 7 $\frac{1}{2}$ d.; smaller lots up to 10s. per lb.

SULPHONAL is unchanged, with dealers offering spot on a quiet market at 10s. 1d. to 11s. 2d. per lb.

TANNIC ACID (B.P. *leviss.*) is steady but quiet: quantities at 2s. 9d. up to 2s. 11d. per lb. for smaller parcels.

TARTARIC ACID (B.P. crystals) is about unchanged, with a moderate but rather dragging flow of business: foreign on spot, about 1s. 3 $\frac{1}{2}$ d. per lb., less 5 per cent.; English make is offered at about level figures.

THYMOL remains very quiet: synthetic fine white, 8s. 3d. to 9s. per lb. as to quantity.

VANILLIN is unchanged and there is not much business moving: ex clove oil, 14s. per lb. in cwt. lots; ex guaiacol, 13s. 6d. per lb. in cwt. lots; lower prices in each case for larger quantities.

Industrial Chemicals, etc.

London, February 12.

REPORTS to hand this week continue to emphasise the steadiness of the market in all directions. Business seems to be fair on average, but not quite so brisk as it was a month ago.

ACETIC ACID continues fairly bright, with prices unchanged: 80 per cent. technical, £36 15s.; 80 per cent. pure, £37 per ton in barrels; glacial, pharmaceutical, 99 to 100 per cent., £66 in glass demijohns; glacial in barrels, £56 per ton ex store.

ACETONE is also bright, market and prices are firm: B.G.S., £71 10s. to £80 per ton, in drums, ex store, as to quantity.

AMMONIA (ANHYDROUS) continues to meet with fair inquiry: 99.95 per cent., in loaned cylinders, 10d. to 1s. per lb. carriage paid; slightly less for big contracts.

AMMONIUM CHLORIDE is moving in the usual quantities, with dealers' prices for grey galvanising steady at about

£21 7s. 6d. to £21 10s. per ton in casks, ex store; slightly less for contracts.

ARSENIC.—Although there has been no improvement in the demand, the tone is steady at about £15 17s. 6d. for white Cornish 99 per cent. f.o.r. mines. Mexican high-grade is offered at about £16 15s. to £17 c.i.f. Liverpool.

BARIUM CHLORIDE is steady and business is fair: 98 to 100 per cent. primo white crystals, on spot, £11 7s. 6d. per ton, in casks, ex store.

CAUSTIC POTASH is still rather slow, but Convention prices are holding: 88 to 92 per cent. solid, £29 10s. to £34 10s. per ton, in drums, as to quantity, ex store; 30s. per ton less c.i.f. Occasional outside lots are offered at slightly cheaper prices.

COPPER SULPHATE.—There is a fair inquiry for export and the tone is well maintained, since copper has advanced again: British makers ask £27 per ton upwards for casks f.o.b., less 5 per cent.

FORMALDEHYDE continues in quite good demand, but competition is spoiling the market: 40 per cent. by volume, £34 per ton, in casks, ex store; less for big contracts.

ISOPROPYL ALCOHOL is unchanged, with a steady flow of business: reliable makes, 11s. to 12s. per gallon, in drums, carriage paid.

LEAD PRODUCTS.—Lead acetate, spot, brown, £39; white, £40 7s. 6d. per ton in casks. Convention prices for red and white lead are unchanged.

LITHOPONE continues in fair call, with prices for 30 per cent. Continental red seal steady at £19 10s. per ton, in casks, ex store; slightly less for contracts.

OXALIC ACID is a bright market and prices are unchanged: quantities, £32 per ton, in casks, ex wharf; spot parcels, 32s. 6d. to 33s. per cwt. ex store.

POTASSIUM BICHROMATE is steady at the home trade price of 4 $\frac{1}{2}$ d. per lb., with small rebates for large quantities.

POTASSIUM CARBONATE remains quiet but steady: 90 to 92 per cent., £23 10s. to £24; 96 to 98 per cent., £25 10s. to £26 per ton ex store; slightly less for contracts.

POTASSIUM CHLORATE is well held at the previous higher price of £26 15s. per ton ex store; smaller lots from 3 $\frac{1}{4}$ d. per lb.; business is slow.

POTASSIUM PERMANGANATE is steady but quiet: commercial quality, in two-cwt. drums, 5d.; smaller lots, 5 $\frac{1}{2}$ d. per lb. ex store.

POTASSIUM PRUSSIATE has been in a little better call: yellow, in quantities, £63 10s. to £65 10s.; single casks, 7d.; small parcels, 7 $\frac{1}{2}$ d. per lb. ex store.

SAL AMMONIAC is steady, but business is limited: dog-tooth crystals, £32; medium, £28; fine white crystals, £17 12s. 6d. per ton, in casks, ex store; slightly less for big contracts.

SALTCAKE is firm and active at 55s. per ton, in bulk, delivered.

SODIUM ACETATE is unchanged on a quiet market: spot, £20 15s. per ton, in casks, ex store.

SODIUM BICHROMATE is steady at the home trade price of 3 $\frac{1}{2}$ d. per lb.

SODIUM CHLORATE is firm, with the price for quantities now at £25 15s. per ton ex store; market is dull.

SODIUM HYPOSULPHITE is in fair demand: dealers quote pea crystals at about £15 per ton in one-cwt. kegs; commercial quality, £9 10s. per ton, in casks, ex store; home makers' price for pea crystals to home consumers on contract, £15 per ton, carriage paid to buyer's station.

SODIUM PRUSSIATE is steady, with a limited business moving: quantities, 4 $\frac{1}{2}$ d. to 5d.; smaller parcels up to 5 $\frac{1}{2}$ d. per lb. ex store.

SODIUM SULPHIDE is quoted by dealers ex wharf at £9 5s. and £10 5s. per ton for solid and broken, respectively, in drums, ex wharf.

COAL-TAR PRODUCTS, ETC.—Carbolic acid crystals meet with a fair amount of inquiry; the market is very steady and there is not likely to be a break in the price. Cresylic acid is still dull and inclined to weaken a little. Pitch continues unchanged at the controlled price. ANILINE OIL is unchanged at 8 $\frac{1}{2}$ d. per lb., carriage paid, packages extra. ANILINE SALT is also unchanged at 8 $\frac{1}{2}$ d. per lb., carriage paid, packages extra. BETANAPHTHOL is unaltered at 9 $\frac{1}{2}$ d. per lb., carriage paid. **CARBOLIC ACID CRYSTALS.**—A fair amount of inquiry is noted and some business is being done; supplies are not so short: home makers' prices for contracts are steady at 7d. to 7 $\frac{1}{2}$ d. per lb., carriage paid, according to quantity; crude carbolic acid 60's are steady at 2s. 5d. to 2s. 7d. per gallon naked at works. **CRESYLC ACID** is inclined to weaken a little

and is still dull: pale 97 to 99 per cent., 2s. 1d. to 2s. 3d.; refined, 2s. 8d. to 2s. 10d.; dark 85 per cent., 1s. 8d. to 1s. 10d. per gallon naked at works. **NAPHTHALENE** continues quiet and unchanged: flakes and balls, £14 15s. to £15 per ton, in cases, ex wharf. **METHYL ALCOHOL** continues unchanged on spot at about £42 per ton in drums; cheaper prices for quantities. **PYRIDINE** is nominal and lifeless at 4s. to 4s. 6d. per gallon f.o.b. **TOLUOL** is steady, with a fair amount of business: commercial 90's, 1s. 10d.; pure, 2s. 2d. per gallon ex works. **XYLOL** continues dull: commercial, 1s. 10d.; pure, about 2s. 1d. to 2s. 2d. per gallon ex works. **PITCH** is quiet and continues unchanged at the controlled price of 47s. 6d. per ton f.o.b. East Coast.

Fixed Oils, etc.

LINSEED oil shows a good recovery on the week, and this market is at present bright and firm. Turpentine at one period of the week also recovered sharply, but the improvement was not maintained, market closing quiet. Palm oils are lower, and other items are mostly dull, but prices are fairly steady as quoted. **ACID OILS** are dull and slightly easier: coconut and/or palm kernel 32s.; ground nut, 28s. 6d.; soya, 27s. per cwt. on the spot. **CASTOR.**—Prices are holding on a slow market: pharmaceutical, 48s. 6d.; first pressings, 43s. 6d.; second pressings, 41s. per cwt. spot, in barrels, in not less than one-ton lots. **COCONUT** is quiet: deodorised, spot, 41s. 3d.; Ceylon, 34s. c.i.f. **COTTON.**—At the lower prices now quoted the market is firm and tends to recover: deodorised, 36s. 6d.; common edible, 34s. 6d.; soapmaking, 32s. 3d.; crude, 30s. 6d. spot. **GROUND NUT** is dull and easier: deodorised, spot, 40s. 9d.; crude Oriental, 36s. 6d. c.i.f. **PALM KERNEL.**—Business remains quiet: deodorised, 40s. 9d.; crude, 34s. 3d. spot. **PALM.**—Prices for all grades are easier, but the market is now steady and business is moving fairly well: Lagos, 31s. 3d.; softs, 30s. 9d.; mediums, 30s. 3d.; hards, 30s. 6d.; bleached, 33s. 3d. spot. **RAPE** is quiet and easier on quotation: refined, 42s. 3d.; crude, 40s. 6d. spot. **SOYA.**—Prices are better, market closing dull: deodorised, 38s.; crude, 35s. spot. **LINSEED** (raw, naked).—Prices for all positions show an advance and the market is now firm and bright: on spot, 44s. 9d.; February, 41s. 7 $\frac{1}{2}$ d.; March-April, 40s. 4 $\frac{1}{2}$ d.; May-August, 39s. 7 $\frac{1}{2}$ d. Boiled oil on spot, 48s. 6d. **TURPENTINE.**—There was a distinctly firmer tone early in the week, but the recovery was not maintained, and the London market closed quiet at 42s. 9d. on the spot; March-April, 43s. 3d. On balance the spot price was unchanged on the week. Last week's deliveries here were 1,911 barrels, making a total since January 1 of 10,160 barrels, which compares with 10,104 barrels for the same period last year. Stocks were reduced further to 33,147 barrels, compared with 29,690 barrels a year previous. Including the landings, the London visible supply made up at 33,947 barrels, which compares with 30,914 barrels a year ago. **RESIN.**—American receipts were reported smaller, thus causing encroachments on stocks, but demand on this side has remained of limited extent. C.i.f. terms were about as follows: American B to D 16s. 1 $\frac{1}{2}$ d. to 16s. 9d., E to F 17s. 3d. to 17s. 7 $\frac{1}{2}$ d., G 17s. 10 $\frac{1}{2}$ d., H to I 18s. 1 $\frac{1}{2}$ d., K/M 18s. 4 $\frac{1}{2}$ d., W/G 18s. 10 $\frac{1}{2}$ d., and W/W 19s. 10 $\frac{1}{2}$ d., all c.i.f. to arrive. French grades were neglected. **WOOD** is dull and easier at 65s. per cwt. for Hankow on the spot.

LUBRICATING, MINERAL, BURNING OILS, ETC.—The general position continues steady, although business remains poor. Lubricating oils are easy as quoted. **BENZOL** is quiet and continues easy at the quoted price: standard motor 90's, 1s. 6d. per gallon, ex works, in tank wagons; ex London works, 1s. 7 $\frac{1}{2}$ d. **FUEL OIL** continues quiet: .950 gravity, £3 5s.; .890 gravity, £3 17s. 6d. per ton ex tank; cheaper forward. **PARAFFIN OILS** are unchanged, with the market firm: American standard white, 1s.; water-white, 1s. 1d. per gallon, barrels free, ex wharf. **PARAFFIN WAX** and **SCALE.**—Wax is unchanged and quiet from 2d. to 5d. per lb., according to melting point, in bags. Scale for shipment is quoted at about £15 17s. 6d. per ton c.i.f. U.K. port. **WHITE OILS** are quiet, with prices steady: special No. 1, £25 10s.; No. 1, £24 10s.; No. 3 half-white, £21 15s.; No. 4 half-white, £20 per ton, drums and barrels free, ex wharf. **SOLVENT NAPHTHAS** continue in better demand: 90 to 160, 1s. 2d. to 1s. 3d.; heavy 90 to 190, 1s. per gallon naked at works. **PETROLEUM JELLIES** are steady, with supplies still short: white to snow-white, £36 10s. to £46 10s.; amber and yellow, £18 10s. to £22; dark stiff green, £12 7s. 6d. per ton, barrels free, ex wharf. **LUBRICATING OILS** continue quiet and still somewhat unsteady: spot, pales, £9 12s. 6d. to £21; reds, £11 to £21; dark cylinders, £13 10s. to £33 10s.; filtered cylinders, £22 15s. to £41 10s. per ton, less 2 $\frac{1}{2}$ per cent. **SOLUBLE OIL** and **CUTTING COMPOUNDS** are unchanged at from £20 to £22 per ton net. No. 1 RUSSIAN OIL on spot is offered at £14 10s. per ton, less 2 $\frac{1}{2}$ per cent., barrels free, ex wharf.



Letters for this section should be written on one side of the paper only. Correspondents may adopt an assumed name for purposes of publication, but must in all cases furnish their real name and address to the Editor.

P.F. 666

SIR,—Further to the correspondence which has taken place in the trade journals regarding the proprietors of certain well-known proprietary articles who are now making use of the chemist's privilege of selling a patent medicine unstamped by printing on it a P.F. number and disclosing the formula on the label and not recompensing the chemist sufficiently for the advantage they thus obtain, the Leigh and District Chemists' Association have resolved only to buy and sell the stamped article until the proprietors give us a better recognition of the use they are making of the chemists' privilege by increasing the profit on articles which are sold in this way. Such articles sold unstamped with a P.F. number should bear at least 33½ per cent. profit through the wholesaler (and this is only the percentage many other trades are working on at the present), and more if bought direct or on window-show terms. At present they are just taking advantage of the chemist, as, of course, the unstamped articles cannot be sold by any other trader. We hope other areas will take this matter up, and that the R.P.U. and C.D.A. will take note.—Yours faithfully,

R. HAMPSON,
Hon. Secretary, Leigh and District Chemists' Association.

SIR,—The game having started, the pace will become greater and greater. What the House of Commons refused to do (*C. & D.*, 1927, I, 518), "remove this tax on the sick and ailing as a humanitarian act," is now being done by those who have found a loophole; but even these may find the end thereof to be disastrous to them.

Yours truly,
ARTHUR OGLESBY.

SIR,—The position regarding "known, admitted, and approved remedies" has been developing for some long time; to my knowledge it was brought to the notice of the R.P.U. two years or more ago, but, as far as I know, nothing has been done. Perhaps it is now sufficiently grave for the Society to take it up and so show that our certificate and membership has really some value to the owner and that they are able to maintain it. The prospectus issued by Phosferine, Ltd., nearly two years ago shows that of the £410,000 purchase price paid to Messrs. Ashton & Parsons £388,900 was for goodwill; this leaves £21,100 for tangible assets. It also states that the company has 9,000 regular customers in Great Britain and the bulk are retail chemists. I do not know how much of this £388,900 is due to the interest shown by retail chemists, but if rather more than half of it were given to our Benevolent Fund as deferred payment for our past services the deficit would be no more than made good. I hope the trade will show a firm and united front in this matter, that Messrs. Phosferine's goods will not be sold by chemists unless ordinary purchases give us 25 per cent., quantity discounts and payment for displays extra, and, in addition, either (1) the packages be fully stamped, giving the Revenue the benefit; or (2) the selling price be reduced by the value of the stamps; or (3) the full value of the stamps saved be paid to retail chemists. There is now a great deal of money invested in proprietary medicine companies, and the retail chemist is likely to be badly put to it to retain what remains of his own. It is bad enough that a qualified man seeking bread and butter should afford an unqualified man the means of a living, but this action of Phosferine, Ltd., beats everything; it goes to the very root of the value of our qualification.

I am, etc.,
LONDON CHEMIST (10/2).

SIR,—It would seem that some proprietors of advertised remedies, in their anxiety to pocket the value of the patent-medicine stamps, are taking a very short-sighted view of the position, and by issuing their goods under the

exemption carried by disclosure of the formula they are in the position of grasping the shadow with the risk of losing the substance. The practice seems to be developing rapidly and extensively, and it is quite obvious that sooner or later the Government will be compelled to take notice of what may prove to be a serious loss of revenue. There is evidently a risk that the whole position will be reviewed. If this came about, it might hit the large manufacturers and also all retail chemists who pack their own name remedies, and we might be faced with the loss of yet another valuable right; and it is advisable for chemists to evolve some united and concerted plan of campaign and to decide whether they will continue in the marketing of these lines or not. The new terms are far from being as favourable as the old ones in respect to wholesale prices and discounts, and there is a definite loss on the exchange.

Faithfully yours,

CONCESSIONNAIRE (11/2).

SIR,—Are not the manufacturers of proprietary articles, who are taking advantage of the unstamped proprietary exemption clause for chemists, and at the same time packing a stamped one at the same price, putting themselves in an awkward position and rendering themselves (and incidentally the retailers) liable for heavy penalties by doing so? If an unstamped article is sold at 1s. 3d., then legally it should without doubt bear a 6d. stamp when sold by grocers, etc. If this reasoning is correct, and I think it is, then there are only three courses open to the manufacturers, viz.:—(1) To stamp all proprietaries (and lose all advantage of the exemption); (2) to reduce the unstamped 1s. 3d. lines to 1s. and *pro rata*; (3) to sell only unstamped proprietaries. If it comes to the last proposition, then without doubt the drug trade as a whole would get the benefit in reserved sales (which would be more profitable than poisons).—Yours faithfully,

AQUA DOMO (11/2).

SIR,—It would appear that the proprietors of Phosferine have assumed that all chemists will be perfectly satisfied with the reduction in price of the unstamped preparation, and meekly allow the surplus profit to swell the tills of the manufacturers. Surely every chemist will rise up in angry protest at this state of affairs. Why should not Phosferine now be sold to chemists at a price which deducts the whole price of stamps, viz., 3d., 6d. and 1s.? If this were done, chemists would be justified in retailing to the public at a corresponding reduction in price. Grocers would thus be forced to lose their custom and chemists would hold their rights as vendors of medicine. Failing this, chemists have no option but to refuse to sell the unstamped article. The public will never understand the existing state of affairs, and will quite naturally assume that grocers alone are selling the genuine article. Are chemists, with their years of training and study, now to fall below the rank of grocers?—Yours, etc.,

FAIR PLAY (11/2).

SIR,—The attack made on Phosferine by your correspondents is in my opinion anything but fair play; it may be play, but it is not fair. Let us remember that Phosferine is "the remedy of kings," and there are not so many kings about now as there were; it is natural that the makers should have to look around and study economy. . . . Mr. Fairplay II has a lot of stamped Phosferine, and "if this leaks out" it will make a mess in the drawer; he will then have to send the packets back and receive in exchange the unstamped kind, so he will not be able to give the public the medicine stamps. Will they care? . . . I believe that each of your correspondents would do exactly the same as Messrs. Ashton & Parsons if they had the chance. They attack a firm, the name and address of which is known, but they themselves prefer to hide their identity. Is that fair play? Had the makers sent round an experienced traveller with new stock in the car with him, they could have exchanged it on the spot; almost every chemist would have let it go and no one been offended. Let us leave Ludgate Hill alone. . . .

Faithfully yours,

E. A. SIBTHORPE.

Bedford.

Are Chemists Business Men?

SIR.—“Representative” (*C. & D.*, January 18, p. 85) has, on the face of it, good cause to complain of the poor reception he had from chemists with regard to his advertising scheme, and especially as he says that he was carrying an old-established product. But let us consider it from the chemists’ point of view. In the case of an old-established line they were probably slow in not taking up such a scheme, as it must be presumed that it was a fairly steady seller. But there are so many of these schemes at the present time, and over and over again chemists have been loaded up with stock which it has been impossible to move, or which only sells for a short time while the advertising lasts, and then drops, with the result that there is a large amount of dead stock left over. Further, in these days the chemist has to keep a stock of such a range of lines, many of them practically identical products manufactured by different firms, that he cannot lock up capital to any extent, even where local advertising is adopted. And often the terms are put forward in such a way that the chemist must take a certain amount, so many dozens of two or three sizes of an article, to link up with the advertisements; many chemists feel that they are being dictated to, and it is a national characteristic that we object to being told that we must do something whether we like it or not. And having placed the initial article, the manufacturer soon proceeds to bring out a number of subsidiary ones, which are nearly always bad sellers, but it is necessary to have one or two in stock for the odd customer if the scheme is taken up. And then there are the stores; if “Representative” had been successful in placing his scheme with a reasonable number of chemists in any locality, would he have refrained from offering it to the stores? I think not. We have only to look at any newspaper to see that in the advertisements of the majority of proprietary lines the stores are mentioned by name first as sources of supply, and if chemists are mentioned at all it is generally in the phrase “And of all chemists.” As the stores have a perfect right to call themselves “chemists” so long as they employ a qualified man, and as a trader of any description can call his premises a pharmacy or put up a notice “Chemists’ Sundries” or “Chemist’s Department,” it follows that the last place the public would go to after reading such an advertisement would be the genuine pharmacist’s establishment. Chemists can hardly be blamed, therefore, if they are a little sceptical of the advantages of such schemes.

Yours truly,
LOADED UP (28/1).

A Wealthy Applicant

SIR.—Supply and demand rules all business transactions, and I would point out to the large number of men now qualifying that the supply exceeds the demand; if I may judge by the offers I have recently received from applicants, I very seriously question whether on the average qualified men are receiving £4 a week. But then how can any employer afford to pay more for N.H.I. work? Certainly not on a 4d. fee.

Yours faithfully,
1868 (4/2).

SIR.—“Qualified Chemist” (*C. & D.*, February 1, p. 145) complains that £4 a week is not the wage of a bus driver, and therefore no salary for a pharmacist. I am fully in sympathy with his remarks on this point, but would add that bus drivers are efficiently organised in a trade union, which probably accounts for the wage. There is also another “but.” In pre-war days, when a reliable qualified man had only to open the Supplement and make up his mind which advertisement he would reply to with almost a certainty of getting the post, £3 a week outdoors was considered very good pay; was it really any better than £4 to-day? What has altered most is what men expect to get in the way of enhanced living and amusement. The chemist’s turnover is a fraction of that of other shopkeepers, and yet the wages of assistants are, as a rule, higher than those in other trades. “Qualified Chemist” also refers to the number of advertisements for “Situations Wanted” in one *C. & D.* Supplement; if he will turn to the heading of “Businesses for Disposal” in the same number he will find a whole page of advertise-

ments from men anxious to sell, without counting those appearing under the agents’ notices or a lot more for sale privately which do not appear in print. Does not this convey to him that there must be something radically wrong with the employers’ side of pharmacy as well as the employees’? A trade, as a rule, pays what it can afford.

Yours truly,
FOUR-POUNDER (10/2).

Pharmacy Week

SIR.—Regarding Mr. W. C. Birks’s remark in his letter (*C. & D.*, February 1, p. 145): “Is it not . . . the fact that the ordinary chemist’s window is exploited by advertisers?” I should like to point out that it is agreed throughout the world that advertising creates the demand, and as the demand for advertised goods is beneficial to the retailer (as well as the manufacturer) it is profitable for the retailer to give his window to nationally advertised articles. On the question of economics, which is the most profitable transaction, to sell £10 worth of goods at 50 per cent. profit, or £100 worth at 33½ per cent. profit? I consider the chemist who uses his window to display nationally advertised lines is a keen business man.

Yours faithfully,
M. F. TRAVERS CLEAVER.

London, S.W.1.

A Member’s Dissatisfaction

SIR.—“Arsenic (29/1)” scarcely does justice to the qualification of Ph.C. I will grant him that the Ph.C. is not essential in retail business, and that the F.I.C.s and B.Sc.s have managed to lay hold of most of the appointments in connection with the Sale of Food and Drugs Acts. Perhaps a little more aggressiveness on the part of our own Society might have avoided the latter result. However, I believe there are distinguished analysts under the Sale of Food and Drugs Acts who possess the qualification of Pb.C. only. To the best of my knowledge, the qualifications B.Sc. and F.I.C. have no legal significance; the Ph.C. has legal recognition. How many B.Sc.s or F.I.C.s have any real knowledge of *materia medica*, microscopical and otherwise? I have evidence to indicate that the Ph.C. is the best all-round man to carry out the tests of the B.P. from the first page to the last. In conclusion, I fail to see why an extra qualification should be so detrimental in retail business as “Arsenic” would indicate.

Yours faithfully,
F. WALKLET, Ph.C.

Burslem.

A Four-Exposure Film Wanted

SIR.—You are probably aware that last year a four-exposure “20” film was sold for 6d. That size film represents at least 75 per cent. of the total amount of films which are sold, and by doing so, a large proportion of the film trade, together with the subsequent D. & P. work was captured from the recognised photographic dealers. To counteract this move the film manufacturers announce that they are shortly bringing out an eight-exposure “20” film selling at 1s. Of course, everyone knows that that daring policy is doomed to failure absolute and final. I have been in correspondence with one of the largest makers of films ever since that announcement was made, and I am now in a position to say that we can have a four-exposure “20” film to sell at 6d. if (a big if) everyone who is interested will write to the film makers (I need not give their name and address) and tell them on a postcard that they want a 6d. film to compete with the stores, and they want it in time for Easter. For, Sir, this morning I had a letter from a sales manager, in which he said, “Of course your argument is unanswerable, and if you only spoke for the whole trade it would be a very easy matter for us to meet competition on its own ground.” Now will everyone who wants to fight on equal terms send that postcard, and will branch secretaries of the Retail Pharmacists’ Union stir up their members to act promptly?—Yours truly,

H. M. TRANMER.

Smethwick.

Dispensing Notes and Difficulties

Solidified Easton's Syrup

SIR.—I should be pleased if you would explain why if Easton's syrup is made according to the B.P. process it solidifies after dissolving the quinine sulphate and strychnine in the ferrous phosphate solution.—Yours truly,

JUVENIS (28/118).

[The Easton's syrup solidified when you added the quinine and strychnine to the ferrous phosphate solution because you had too great a concentration. If you dissolve the iron wire in the diluted phosphoric acid in a water bath, instead of over the open flame or on an asbestos mat, you would get no evaporation of water. If you possess a steam steriliser you should allow the iron to dissolve in that. It is less trouble and the result is a superior syrup.]

An Explosive Mixture?

SIR.—The following mixture tends to burst the bottle on keeping. Please explain how this should be prevented.

Potass. acet.	...	...	...	5iv.
Sodii salicyl.	...	...	...	5vj.
Ext. glycyrrh. liq.	...	...	...	5iij.
Aq. chlorof.	...	...	ad	5vij.

Yours, etc.,

A. B. C. (27/81).

[There is no reason for this becoming explosive in a week. The chloroform is very weak as an antiseptic, but the salicylate would prevent micro-organisms from growing in the diluted liquorice extract. If the acetate is impure it would contain carbonate, and the liquorice might be acid, and when mixed some CO_2 would be produced. We do not think this would happen with fresh, well-made materials. In extremely hot climates the chloroform might evaporate and some decomposition occur. We stood this mixture on a shelf over a hot radiator and no accident occurred.]

Legal Queries

D. S. (11/1).—Is a manager who is in sole charge of a business allowed by law to return to the shop on the afternoon of the early-closing day, from 6 to 8 p.m., for dispensing and the sale of medicines. [If the manager spends most of his time in connection with serving customers, receiving orders or despatching goods, he is a "shop-assistant" within the meaning of the Shops Acts, and on one day in the week must not be employed in the shop at all after 1.30 p.m.]

S. G. S. (25/81) borrowed money for educational purposes, and asks if he may obtain relief from income tax in respect of this loan, which is being repaid by instalments. [No relief is granted as regards the principal, but if the loan carries interest the interest may be allowed as a charge. When completing the form of income tax return, the section relating to charges on income should be filled up. If paid less tax the gross amount should be stated for the purpose of obtaining the proper scale of reliefs, but it should be remembered that in this case the payer must account to the Inland Revenue for such tax deducted which by reason of such deduction by the borrower, makes it tax paid by the lender, the borrower having acted as collector.]

E. G. D. (21/1).—The Board of Customs and Excise recognises the extension of the exemption granted in favour of "known, admitted and approved" remedies to medicines sold by a limited liability company, co-operative society or other corporate body, provided the relevant provisions of Section 3 of the Poisons and Pharmacy Act, 1908, are in all respects complied with. In the case of manufacturers on a large scale, the Board of Customs and Excise require that companies, who technically have no right to sell "known, admitted and approved" remedies unstamped, should have their laboratory controlled by a qualified chemist or a person who has served an indentured apprenticeship, in order to enjoy the exemption granted in favour of "known, admitted and approved" remedies.

Miscellaneous Inquiries

When samples are sent particulars should be supplied to us as to their origin, what they are, what they are used for, and how. We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them.

A. & A. (7/38).—FILTERING OF COPAIBA BALSAM.—The best way to filter balsam of copaiba and the most expeditious method is to use a filter press which is maintained at a suitable temperature. However, if this apparatus is not available, the old method, which is still adopted by many leading houses, yields excellent results. This consists in mixing a small portion of copaiba, previously warmed to make it as liquid as possible, with some talcum or kieselguhr (a magnesium salt must not be employed for this purpose, owing to its ready combination with the acids in the balsam). This mixture is then evenly spread over the sides of a flannel bag and allowed to set. This prepared flannel bag is then used as the medium for filtering the balsam until it no longer runs through clear, when the flannel must be again prepared as described above. However, in filtering balsam of copaiba it is imperative to conduct the operation in a warm room in order to promote the flow of the liquid.

J. T. P. (13/128).—ELECTROLYSIS OF WATER.—The following are the answers to your questions: (1) The rate of evolution of hydrogen and oxygen during the electrolysis of water is obtainable from Faraday's well-known "Laws of Electrolysis." These are: (a) the mass of an ion liberated is proportional to the quantity of electricity which has passed (quantity of electricity, in coulombs, is the product of the current, in amperes, and the time, in seconds); (b) if several different electrolytes are included in the circuit, the relative masses of the liberated ions are proportional to their chemical equivalents. It has been shown that the passage of one coulomb will deposit 0.001118 gm. of silver. Hence by Faraday's second law, 0.001118

one coulomb will cause the evolution of $\frac{0.001118}{107.073}$ gm. of

0.001118

hydrogen, and $\frac{0.001118}{107.073} \times 8$ gm. of oxygen. Hence the

volume of gases liberated by the ampere per minute (60 coulombs) is, approximately, 6.9 c.c. of hydrogen and 3.5 c.c. of oxygen. (2) Answered by Faraday's first law—the volume depends solely on the quantity of electricity passed. (3) It is not clear whether this query relates to electrolysis on a commercial scale or to a laboratory demonstration. Platinum foil for both electrodes is quite satisfactory for the latter, but less expensive metals—e.g., sheet iron coated with nickel—are used in commercial work. (4) For satisfactory working a current density of not less than two amperes per square decimetre of electrode surface should be used. Theoretically, an E.M.F. of 1.5 volt is sufficient, but in practice about double this will be found suitable. The best electrolyte to use is not acidified water, as is usually recommended, but 15 per cent. caustic soda solution. This variation lessens the tendency to the formation of ozone.

Retrospect of Fifty Years Ago

Reprinted from

"The Chemist and Druggist," February 15, 1880

Bromine Production in the United States

The only important source of bromine in the United States is the liquid which remains after the extraction of salt, and which is known in the salt-making industry as the "mother-waters." . . . The production of bromine was first begun in the neighbourhood of Parkersburg, Pennsylvania, by Hegeman, a Danish chemist, formerly in the employ of the Pennsylvania Salt Manufacturing Company. His operations were at first rather of an experimental character, and there being but little demand for the product at the time, he realised from \$3.60 to \$7 per pound for what he made. The use of bromides becoming more general, however, other chemists began the manufacture of bromine, their process differing from Hegeman's only in certain modifications of detail.



[Commenced C. & D., July 5, 1924]

Seeds: Sale.—The sale of seeds (the subject of an article in the *C. & D. Diary*, 1910, pp. 214 et seq.) is a profitable side-line and appropriate in a pharmacy, especially in rural districts. Chemists selling seeds should be careful that their stock is fresh. Two departments are usually recognised, one dealing with flower seeds and the other with kitchen-garden seeds. An effective window display may be made by showing a few growing plants in pots, with appropriate wording. Wholesale firms will usually supply retailers' catalogues at a small cost.

Selling Prices.—The answer to the question of what is the selling price is, perhaps, the simplest one in business; it is "the price at which the article is sold." That cannot satisfy anyone save a buyer whose need the price fits. It would be better to elaborate the title and ask: "How should the selling price be fixed, since the mere definition of the term 'selling price' can only be the ordinary one of the dictionary?" The fixing of selling prices calls for fine business knowledge and intelligence. The simplest way is to say an article costs 10d. and the overhead charges are equivalent to 20 per cent. of the turnover, therefore the article costs $(10 + 2)d$. to expose in the process of merchandising; in other words, the cost is 1s. Knowing the cost, it remains only to satisfy oneself on the requisite profit. One class of retailer requires 15 per cent., while another thinks 20 or 25 per cent. necessary for addition to the cost. Trades such as furniture, jewellery, furs, etc., require to add considerably more. The chemist thinks that after allowing so much for overhead charges he can safely add 25 per cent. of that cost and reach his selling price; the article cited will thus show the following steps:—Naked cost 10d.; overhead charges 2d.; 25 per cent. of the total amount added 3d., making the selling price 1s. 3d. Having reached this result in this way, it is not unlikely that the article will show a loss when it is sold at such a figure, on account of the turnover in the article being ignored. It has been pointed out that the jeweller will ask a relatively high profit (and the furniture dealer, too), while the furrier may even talk in figures which in theory are wrong, but in practice decidedly expressive—e.g., 300 or 500 per cent. There are articles a chemist sells which change hands at an addition of 45 per cent. on cost, but which ought to be sold at three times the naked cost to be remunerative. It is not every line which shows such a relatively high profit as 45 per cent., as there are many proprietaries being retailed at 10 and 15 per cent. gross profit. It is this disturbance of routine sales which make it necessary to study every line sold relative to every other line. The selling price of an article is thus conceived as the price paid by the customer for an article, which price shall cover the naked cost, plus such other charges as overhead costs, relative costs to turnover, cost of merchandising, the cost of management, and the final true net profit on the employment capital. A division of turnover by an expert in THE CHEMIST AND DRUGGIST some years ago showed that the relative additional costs to naked cost should be as in the following table:—

Article	Times of turnover per annum	Unit cost one	Addition to unit cost
Drugs	... 12	1	0.5
"	... 6	1	0.75
"	less than 6	1	1.00
Sundries	... 12	1	0.75
"	... 6	1	1.00
"	less than 6	1	1.25

Proprietaries and photographic articles are generally on a fixed basis, account of which is taken in the relative

selling prices given. Dispensing requires a more accurate method for fixing the selling price. (See Dispensing: Charges.)

Seltzer Water.—In 1778 a French pharmacist named Vanel introduced a powder with which to make eau de seltz, or seltzer water. At the present day for 10 oz. of aerated water, gr. v.-x. of powder, made as follows, is used:—Sodii chloridi, 30 parts; sodii bicarb., 30 parts; sodii sulph., 1 part; sodii phos., 1 part. The water is prepared in a seltzogene.

Seltzogene.—Used for the preparation of seltzer water, eau de Vichy, soda water and other kinds of aerated waters. Usually in the form of two glass globes, the smaller at the top, and covered with wire to withstand pressure. Sizes from two to eight pints capacity are supplied, and the weight of the charges varies accordingly. To charge the seltzogene, the lower globe is filled with water by means of a funnel, and the neck closed with a stopper. The charges are placed in the upper globe, the stopper removed and the cap screwed down tightly. The seltzogene is then inverted so as to allow sufficient water to run into the upper globe for generating gas, and after about an hour is ready for use.

Semolina.—A foodstuff prepared from the central part of hard wheats which are rich in gluten. It is largely used in the South of Europe and contains about 11 per cent. of protein. It can thus be considered a fairly valuable nitrogenous vegetable food suitable for puddings, porridge, etc.

Senecio.—See Ragwort.

Senega.—The root of this plant (*Polygala senega*, Linn., N.O. *Polygalaceæ*) was first made known in this country, about the year 1734, as the Seneca rattlesnake root, being used by the Seneca Indians as a remedy for the bite of the rattlesnake. It is also known as Canadian snake root, milk-wort and mountain flax; in French as *Polygala de Virginie* (*Codex*). Dr. Tennent, a Scotch physician in Virginia, who used it with advantage in pleurisy and pleuro-pneumonia, brought it into notice. It is a herbaceous, perennial plant with slender stems, 6 to 12 inches high, and spikes of dull white flowers resembling those of the common milk-wort of this country. It grows wild in rocky open woods, and is now largely collected in Manitoba and British Columbia, although considerable quantities are gathered further west, and also south, down into the State of Minnesota and the Dakotas. Senega root has a characteristic shape, being enlarged at the upper end into a knotty crown, from which spring numerous wiry stems with scaly rudimentary leaves of a purplish hue. Below the crown the root is somewhat spirally contorted with a keel-shaped ridge formed from the liber running down the concave side of the root. The bark is of a light yellowish grey. The fracture is short and the horny translucent cortex shows no sign of starch. The woody centre is white, cleft with numerous fine longitudinal fissures. The root has a short brittle fracture and an acrid taste, and when handled it disperses an irritating dust due to the presence of a saponin, but neither starch granules nor raphides are present in the bark. The chief constituent is senegin—a saponin, to which it owes its irritating taste. The rootlets are richest in senegin. Senega is used as a stimulating expectorant and diuretic, in pneumonia, asthma and rheumatism. The root is occasionally adulterated, chiefly with roots similar in colour, such as American ginseng root, *Panax quinquefolium* or *Asclepias vincetoxicum*, but the shape of senega root is so characteristic that adulterations are easily recognised. There are, however, varieties of senega in commerce derived from different species. Ordinary senega from *Polygala senega*, Linn., is known in commerce as western senega. A large variety, named latifolia, is called northern senega, and white, or southern, senega is the root of *Polygala alba*, Nutt., and was formerly collected in the Southern States, but is now practically extinct there. Several attempts have been made to cultivate and propagate senega, but these, unlike hydrastis root, have failed, and it is generally supposed that under natural conditions it propagates itself very readily, and a supply

The C.&D. Commercial Compendium

sufficient to take care of the world's requirements is generally available from year to year, restricted production being produced by weather conditions, such as continual rains during June and July, which interfere with the digging rather than with the growth of the root itself. Much of it is gathered by the Indians and itinerants, and its cost or selling price is based on the condition of the labour market rather than anything else, therefore if weather conditions are favourable during June, July and August it can be gathered and sold at normal prices, whereas if digging is restricted very materially during that period and is carried into September, other and more profitable work, such as harvesting, is available and the natives will not bother with digging root, especially since it is then also more difficult to locate on account of the heavier growth of the grasses, etc. Contrary to the usual manner of gathering crude drugs, people are not sent out for the sole purpose of gathering senega. Two very odd methods are employed. The first, when a fur trapper sets forth through the woods, having set his trap, instead of idling his time, browses through the country, extracting the roots of the senega from the ground. Sometimes an energetic gatherer may pick twenty dollars worth of senega in one day. Upon his return home he takes the roots to the local country store and makes an exchange for the living necessities of his simple life. In turn, the general merchant, who purchases the gatherings of all of the trappers in his immediate district, negotiates through his bank for the sale of the material to the dealers. Senega is also an evil and a benefit in the wheat fields. It is a hardy bush and thrives during the cold of winter. In the spring when the ground begins to soften and the farmer prepares to sow his seed, he finds the field mottled with senega plants. A few days spent in ridding the ground of these plants nets him a tidy sum by selling his production after the fashion of the animal trapper. These dealers comprise a number of firms located at Winnipeg, and after the crop is dried, cleaned and stored in their warehouses, marketing to the general crude drug merchants is begun. Whereas many crude drugs have been gradually displaced, at least to some extent, by synthetics, senega root continues to maintain its average consumption—about 160 to 175 tons annually—in fact, in recent years it has materially increased. It is very generally used throughout Europe, Russia being probably the largest consumer, whilst in the East, especially in China and Japan, large quantities are taken.

Senegal Gum.—See Acacia.

Senna.—The official drug consists of the leaflets of the compound leaves of *Cassia acutifolia*, Delile, and *Cassia angustifolia*, Vahl (N.O. Leguminosae), Tribe *Casalpinea*. The former is indigenous to Nubia and the Sudan, and a variety of it is found also at Timbuctoo and Sokoto. It is known in commerce as Alexandrian senna, being formerly shipped from that port. The latter is known as Tinnevelly senna.

History.—The use of senna leaves and pods was probably introduced by Arabian physicians to Western Europe in the ninth and tenth century. Isaac Judæus, who wrote between 850 and 900 A.D., and who was a native of Egypt, mentions that the best senna was that brought from Mecca. At the close of the twelfth century *Ssinen* or *Seenen* is mentioned among the commodities liable to duty at Acre in Palestine. In 1542 a pound of senna was valued in an official tariff at 15 rols, the same price as pepper or ginger. The mediæval physicians of Europe preferred the pods to the leaves, though using both. The species yielding senna first known to botanists was *Cassia obovata*, Collt.; it was cultivated in Italy for medicinal use during the first half of the sixteenth century, hence the term Italian senna used by Gerard, but it was soon recognised that the Egyptian drug was preferable, since, in 1526, an order at Venice was found to the effect that the senna leaves of Tuscany were inadmissible, and the same was applied in 1876 to the senna from Tripoli (*Cassia obovata*), which was called by the Arabs "Senna *balade*," i.e., wild senna, grown in the fields of Karnak and Luxor;

it was considered so inferior that it fetched but a quarter of the price of the "*Seuma jebeli*" brought by the caravans of Nubia and the Bisharin Arabs.

Botany.—The plant is a small shrub, about two feet high, with compound leaves four to six inches long, with four or five pairs of leaflets. The leaflets are oval, lanceolate, widest below the middle of the leaf, unequal at the base, entire, acute and shortly mucronate, thinly pubescent on both sides, especially near the veins, which are prominent on the underside. The pods are flat, broadly oblong, but slightly curved upwards, obliquely stalked, broadly rounded at the extremity, with a minute or obsolete mucro, indicating the position of the style on the upper edge: 1½ to 2½ inches long and ¾ to 1 inch broad. In France, so-called Alexandrian senna is known also as *Séné de la Palte*, and two forms of the species are recognised. The typical one, var. *acutifolia*, the leaflets being attenuated gradually towards an acute summit; (2) var. *obtusata*, (*C. aethiopica*, Guib.) with broader leaflets obtuse at the apex.

Cassia angustifolia, Vahl. This species differs slightly only from *C. acutifolia*. The leaflets are usually in five to eight pairs, narrower and longer in proportion to their width, tapering from the middle to the apex, from one to nearly two inches long, and either quite glabrous or furnished with a scanty pubescence of short hairs on the undersurface. This species yields the Tinnevelly as well as the Arabian, Bombay, or séné moka of the French and senna mekki of the East. French botanists distinguish three varieties of this species: (1) var. *geniniana*, Bisch, with short leaflets, 25.75 mm. long, acute at the apex, nearly coriaceous after drying; (2) var. *Royleana*, Bisch, leaflets larger, acute, thin, and membranous after drying; (3) var. *Ehrenbergii*, Bisch, leaflets long, linear lanceolate, acute, with very elongated fruits. Tinnevelly senna is usually free from any admixture of stalk, flowers, or foreign leaves. The fruits form a separate article of commerce. The leaflets are more commonly widest at, not below, the middle, and are therefore more truly lanceolate. The leaflets have a yellowish-green colour when seen in bulk, differing from the greyish-green of Alexandrian senna. There is also a slight difference in odour. They are much less distinctly pubescent than the Alexandrian leaflets, the short hairs being only noticeable near the veins. It is chiefly cultivated near Tinnevelly, and exported from Tuticorin in the extreme south of India, but is also cultivated in Agra and Bombay. Tinnevelly senna is considered in France to be derived from the var. *Royleana*, Bisch., which has large acute leaves, membranous when dry, and is also known as *Séné de Madras* or *Séné de l'Inde*. Arabian senna, although it is not official in the B.P., is not now regularly imported into this country. It is collected on the extreme south-western coast of Arabia, near Moka or Mocha and Hodeidah and other Red Sea ports, and was forwarded to Bombay, whence it reached Europe under the name of Bombay senna. It is obtained entirely from the wild plant, and it usually contained, during the last century at all events, flowers, pods, stalks and brown decayed leaves, but never any adulterations, and was usually regarded as an inferior commodity, but during the present century, a much better form of Arabian senna, carefully graded, has reached this country from Alexandria. This was sent before the war, according to Joenssen, from the neighbourhood of Mecca to the port of Jeddah, and thence across the Red Sea to Port Sudan to be forwarded to Cairo by rail to be graded, and was thence forwarded to Alexandria for exportation to this country. According to Joenssen (*C. & D.*, 1917, 89, 495) it was mixed by German agents with 50 per cent. of genuine Alexandrian senna, and the siftings were also mixed with the siftings of Alexandrian senna in which they were much more difficult to detect. The graded Mecca senna had smaller and shorter leaflets, resembling those found on the lower part of the branchlets in Alexandrian senna, which rendered it difficult for brokers to decide whether the senna should be classed under the Arabian or Alexandrian kind.

(To be continued.)

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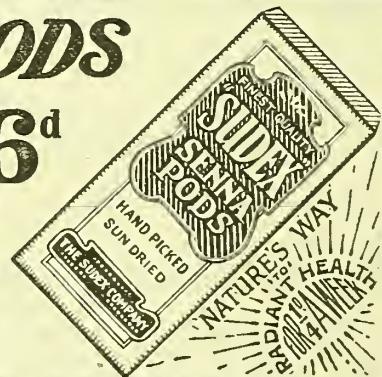
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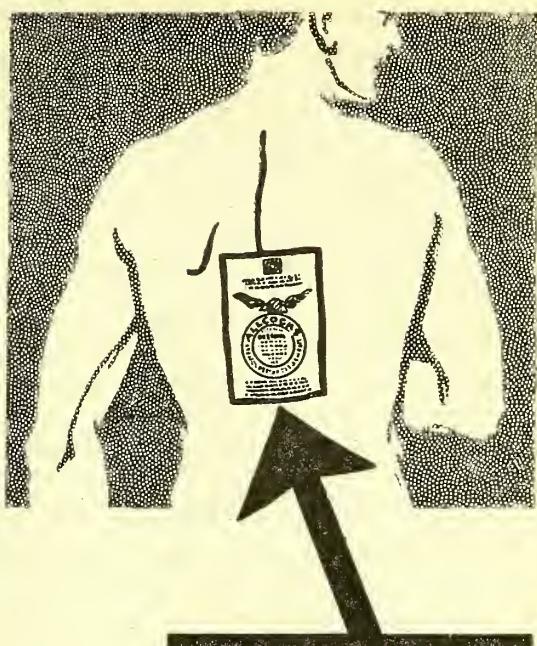
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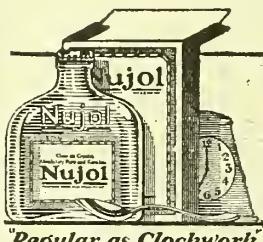
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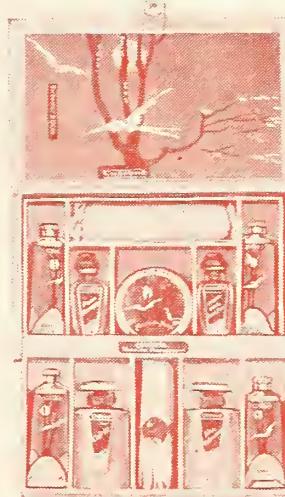
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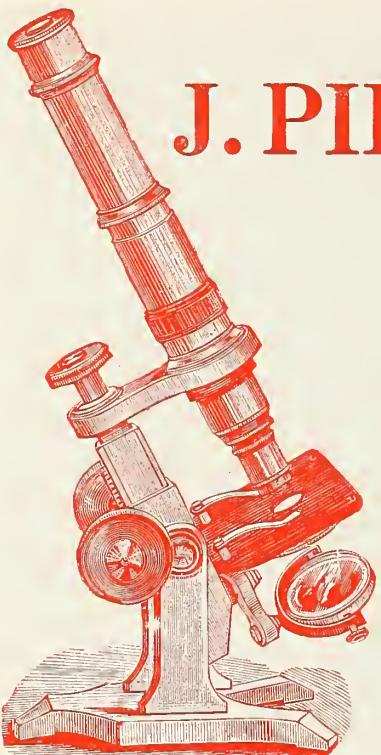
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One dozen in
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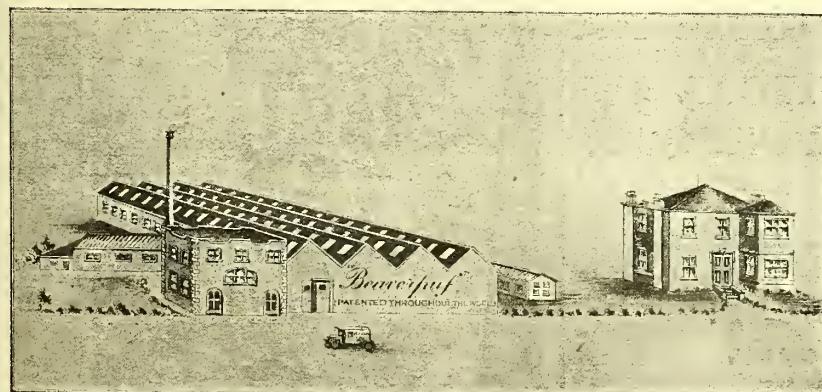
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Export Distributing Agents, AYRTON, SAUNDERS & CO., LTD., LIVERPOOL.

Daily increasing in popularity with both the medical profession and the public. Collosol Ferromalt is now supplied in an attractive packing, admirably adapted for counter display.

Collosol Ferromalt gives a satisfactory margin of profit, and the assurance of complete satisfaction to your clients.

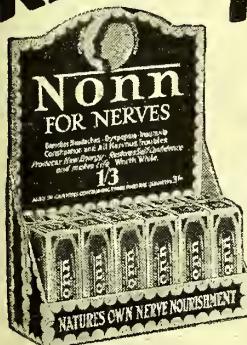
**TERMS AND PARTICULARS FROM
THE CROOKES LABORATORIES**
(BRITISH COLLOIDS, LTD.)

22 CHENIES STREET, LONDON, W.C.I

Telephone Nos.:
Museum 3663, 3667, 5757.

Telegrams:
"Collosols, Westcent, London."

KEEP NONN TO THE FORE !



Nonn sales are increasing everywhere and Chemists are co-operating with our advertising. Are you? If not, display Nonn in one of these attractive containers. It is worth the small space it occupies, for Nonn is a big success and sells readily. So keep Nonn to the fore!

Nonn FOR NERVES RESTORES SELF-CONFIDENCE

Prices and Particulars:

**NONN IS SUPPLIED IN RED CARTONS FOR
MEN AND IN BLUE CARTONS FOR WOMEN**

P.A.T.A. 1/3 per carton, Wholesale 11/3 per dozen
P.A.T.A. 3/- per carton, Wholesale 27/- per dozen

Sole Distributors: Proprietors of Nonn Ltd.
45 Gordon Square, London, W.C.

EVERY SALE OF

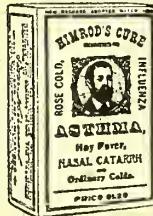
HIMROD'S Asthma Cure

CREATES A SATISFIED CUSTOMER

SUFFERERS SEEKING RELIEF FROM

The paroxysms of

BRONCHIAL ASTHMA
Asthmatic Hay Fever
Common Colds
Nasal Catarrh
Bronchitis



Will be quickly helped by the use of this time-tried remedy. Burn half a teaspoonful, inhale the fumes and the distress vanishes.

ON THE MARKET FOR OVER 50 YEARS

"Himrod's Cure is a well known product, very useful in many cases."
—W. J. Hadley, M. D., formerly lecturer at London Hospital.

May be had from wholesale distributors throughout the world

**Himrod Manufacturing Company, Mfrs.
463/5 Eleventh Street, Hoboken, NEW JERSEY, U.S.A.**

PHEDROS

SYRUP EPHEDRA COMPOUND-MULFORD

PHEDROS is a new cough syrup containing the anti-spasmodic properties of the Chinese drug Ephedra (Ma Huang), the expectorant properties of Squill and Ipecac, and

the stimulant property and salt action of Ammonium Chloride.

PHEDROS is recommended to relieve the paroxysms and allay acute symptoms of coughs, bronchitis, etc.

Each fluid ounce contains:

Chloroform ..	..	..	..	..	..	2 minims
F. E. Ephedra ..	..	..	..	..	..	40 minims
Syrup Squill ..	..	..	..	..	..	180 minims
Syrup Ipecac ..	..	..	..	..	..	40 minims
Ammonium Chlo.ide ..	..	..	..	..	..	8 grains
Syrup Tolu ..	..	..	..	..	..	q.s.

DOSE—One to two teaspoonfuls according to age.

Descriptive Literature and Samples sent on Request.

H. K. MULFORD Co., Ltd.

REGENT ARCADE HOUSE, 252 REGENT ST., LONDON, W.1.

Telephone : Regent 2567.

ARE YOU STOCKING

Cephos
Pronounced *see-foss* RECD.
THE PHYSICIAN'S REMEDY

FOR
**INFLUENZA • RHEUMATISM
NEURALGIA • NEURITIS
LUMBAGO • SCIATICA**

Handsome Profits assured. Order your supplies now.
Retails at 1/- and 3/- in powder or tablets.
Write to Cephos Ltd., Blackburn.

INTENSIVE ADVERTISING

BACKED BY
THOUSANDS
OF VALUABLE
TESTIMONIALS

CONTAINS NO HARMFUL DRUGS

SAFE - SURE - SALEABLE

a non-poisonous, non-caustic antiseptic for use internally and externally in all illnesses arising from micro-organic infection. Certified so safe that an overdose is entirely harmless. Popular prices and widespread advertising have resulted in a steady increase in sales—display it and get your share.

YADIL

The Antiseptic which is Certified by Public Analysts and Pathologists as Safe for Internal and External Use

RETAIL PRICES: Liquid or Yadilets (tablet form) 1/3, 3/-, 4/9, 12/-, 22 6. OINTMENT 1/3 per tin. PASTILLES 1/- per tin. SOAP 1/- per tablet.

YADIL PRODUCTS (1925) LTD.
SICILIAN HOUSE, SICILIAN AVE., LONDON, W.C.I

SENT ON 14 DAYS APPROVAL

Upon RECEIPT of CASH or
Two Wholesale References

'The Argyle' Cash Till

Size 17½ x 9½ x 7, as
illustrated. Solid
mahogany, highly
polished. Lock to
lid and drawer.
Checks action, warn-
ing bell and secret
catch. Coils 3½ ins.
wide, 4/- doz.
Buy direct from the
manufacturers.
Guaranteed for
5 years.

53/6



List of Tills
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free on request

451 Holloway Road,
LONDON, N.7

City Showrooms :
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DUDLEY & CO. Ltd.



TRADE MARK



In Jars
1/6 & 2/11

Profit on
Selling
Price
25%

PRUNOL PRUNE JELLY

NATURE'S FRUIT LAXATIVE FOR CHILDREN AND ADULTS
SAFE AND SIMPLE

Look to your Stocks

Our great advertising campaign is now in progress. We are sending the Public to you. To avoid disappointing your customers order now from your Wholesaler.

SHOWCARDS AND BOOKLETS GRATIS ON APPLICATION

PRUNOL PRODUCTS LTD., 28, BUCKINGHAM GATE,

Phone : Victoria 3536

Wires : "Prunol, Sowest, London."

S.W.1



A perfect blend of Malt Extract made from selected Barley Malt only and the finest Norwegian Cod Liver Oil.

"EDME"

Malt Extract with Cod Liver Oil

AS USED IN THE LEADING HOSPITALS.

Customer's own name and address printed on label.

Write for Samples and Trade Terms to:

EDME Ltd., 122 Regent St., LONDON, W.1. Telephone: REGENT 6719.
Telegrams: "EDME, PICCY, LONDON."

PURE MALT EXTRACT

with FINEST

NORWEGIAN COD LIVER OIL

The Brand that does not separate nor crystallize.

Your own name and address on labels. In English jars, etc. Direct from the actual manufacturers.

THE BRITISH DIAMALT COMPANY
SAWBRIDGEWORTH - - - HERTS.

ORDER NOW
FOR WINTER
TRADE.



MASON'S
Ginger Wine Essence

QUICK
SALES

GOOD
PROFIT

Liberal Window Show Allowance
Artistic Display Material

SEND FOR PRICES.

NEWBALL & MASON, LTD. NOTTINGHAM

RIDGE'S
FOOD

for Infants, and Adults of all ages.

WELL ADVERTISED to the GENERAL PUBLIC.

SAMPLES, ADVERTISING MATTER and SPECIAL
DISPLAY TERMS ON APPLICATION TO:

ROYAL FOOD MILLS, LONDON, N.16

NEW PATENT
Blutergess Sifting Machine
ASK FOR PARTICULARS

SIEVES
WIRE GAUZES

STEVENS & MANNING
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(Southwark Bridge)
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USIEVEIT—Boro—London

TIBO MALT



SCHOLARSHIP CASH PRIZES FOR CHILDREN

Leaflets for dis-
tribution gratis

Showcard in Colour

Special BONUS OFFER!

2 DOZEN @ 2/- (charged 11 as 12)

1 DOZEN @ 3/6 ,,

TIBO PRODUCTS (INTERNATIONAL) LIMITED

H. J. HOXBY (British)

R. THIBAUD, J. QUELLENEC (French)

AUDREY HOUSE

THE SUNSHINE HEALTH VITAMIN FOOD

Superior to Cod Liver Oil because, although you may get Vitamins in ordinary Cod Liver Oil, equally you may not. In Tibo you always get them.

THE FOLLOWING SIGNED GUARANTEE
BY A WELL-KNOWN PHARMACIST IS
PRINTED ON EVERY LABEL.

GUARANTEE

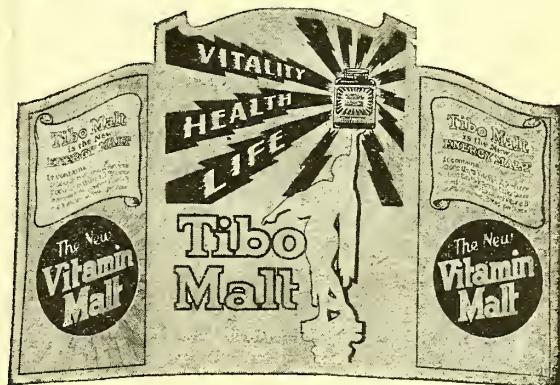
Messrs. Tibo Products (International), Ltd.
5th October, 1929. London, E.C.1.

I have purchased from an independent source a supply of Tibo Extract of Malt. I find it contains Vitamin "A" and "D" equivalent to 20 per cent. Cod Liver Oil. Tested in accordance with the U.S.P. this product contains not less than: 2,000 units Vitamin "A," 1,000 units Vitamin "D" per ounce. The U.S.P. test being for Vitamin "A" only, the following table shows the approximate comparison with well-known substances. Each ounce of Tibo Extract contains: as much Vitamin "A" as six ounces of Butter; as much Vitamin "D" as 1 lb. of Butter; as much Vitamin "B" as 2 lbs of Wholemeal Bread. This certificate is available for Tibo Malt Extract so long as it conforms to the above standard.

(Signed) LLEWELLYN G. JONES,
Chief Pharmacist, Victoria Hospital for Children,
Tite Street, Chelsea, S.W.3

1 lb. Jar 2/- 16/- doz.

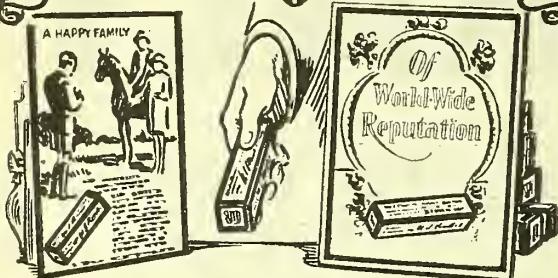
2 lb. , , 3/6 27/- ,



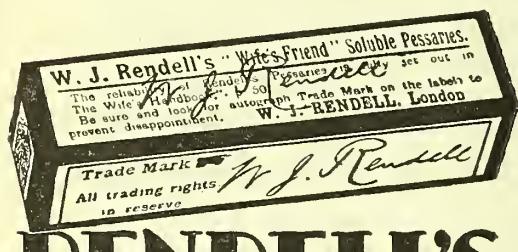
ELY PLACE, LONDON, E.C.1

RENDELLISMS

6

**Dignified in appeal**

It is to serious-minded, worth-while members of the public that Rendell's appeal is addressed. That is why this line finds its place on the counters of high-class chemists everywhere.

**RENDELL'S
SOLUBLE QUININE PESSARIES**

Dignified display matter and interesting literature supplied free on application. Chemists everywhere find them unrivalled for making new customers—permanent, profitable ones. You can get Rendell's from your wholesaler to retail at 2/6 (P.A.T.A.) per box. Remember the public will not accept substitutes.

W.J. RENDELL LTD.

15, CHADWELL STREET, LONDON, E.C.I.

Going Good and Strong!**You should be in this**

Record sales of the Izal Toilet Roll are being made and you must get on to this good seller.

Regular advertisements still run in "Daily Mail," "Daily Sketch" and the chief women's magazines, weeklies and periodicals.

British made of superior white sulphite paper, each roll is thoroughly medicated with Izal.

Fixed price
to public.

Z.48a

**IZAL
Medicated
TOILET ROLL**

Sample roll and terms sent on application to :
NEWTON, CHAMBERS & COMPANY, Ltd.,
Thorncliffe, Nr. Sheffield.
Manufacturers of Izal Products.

Reliance**BRITISH SEAMLESS MOULDED
BATHING CAPS**

OVER 30 DESIGNS and
ARTISTIC MODELS
EMBODY THE NEW
**PATENT GRIP-STRIP
CHIN-STRAP.**

Brilliant Plain Colours,
Jazz Marbling, and Soft
Pastel Lustre Shades.

The biggest range and
most beautiful styles pro-
duced by any Rubber
Manufacturer in the World

**EXCLUSIVENESS
WITH
LOWEST
PRICES.**

Reliance Rubberware Ltd.

Factories - Formosa Street and Amberley Road, Paddington, W.3
Telephone: Paid. 6886. Telegrams: "Rubberware," London.

THE R. H. HEWARD COMPANY SURGICAL APPLIANCES MANUFACTURERS

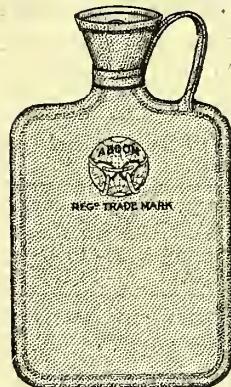
HOT WATER BOTTLE COVERS SEASON 1930

Plain Fleecies.

Striped Fleecies.

Plushette.

Velours.

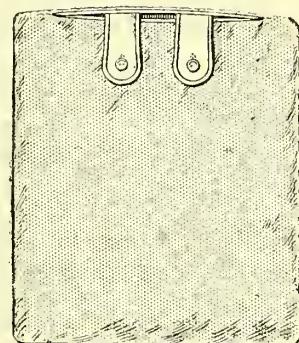


We have ready for immediate delivery 16 different sizes of Hot Water Bottle Covers, of light shades, of the above materials.

Prices from
6/9 to **10/9** per dozen.

Special Prices for large quantities.

Sample sent on application.



CROWN ROAD WORKS - - EAST TWICKENHAM, ENGLAND.

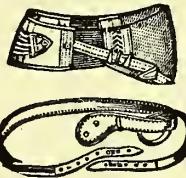
Telegrams: "Beltruss, Twickenham."

Telephone: Popesgrov 2094.

J.H. HAYWOOD, Ltd.

Surgical Appliance Manufacturers,
Castle Gate, NOTTINGHAM
Telephone: 40488 NOTTINGHAM.

Established 1833



SPECIALITIES FOR WINTER.

ELASTIC HOSIERY (Seamed and Seamless), TRUSSES (Spring and Elastic), SUSPENSORY BANDAGES, BRACES, LADIES' AND GENT'S ABDOMINAL BELTS for support and warmth, made in felt, flannel and fleecy.

CHEST PROTECTORS, SLEEPING SOCKS, INDIA-RUBBER AND AIR-PROOF GOODS, NURSING REQUISITES, DRUGGISTS' SUNDRIES, &c.



PRICES ON APPLICATION

Surgical Rubber Goods

VENUS, OWL, GODIVA
& BALLOON BRANDS.

NOTICE.—Several instances of the sale of VENUS BRAND goods other than their make having been brought to the notice of Joseph Harris & Co., their Solicitors are instructed to take proceedings against anyone (Makers or Vendors) fraudulently using the name or design of VENUS or any imitation thereof in connection with Seamless Moulded Goods.

SEAMLESS MOULDED SURGICAL GOODS, PESSARIES, HOT WATER BOTTLES, URINALS FOR NIGHT OR DAY USE. Wholesale & Export Only.

JOSEPH HARRIS & CO., Rubber Works, Broadheath, Altringham.

Best sellers

The public is asking for **ZEAL CLINICAL THERMOMETERS**

because they are:-
GUARANTEED TO STAY ACCURATE CONSISTENTLY ADVERTISED

Made by
ZEAL

- the name the public knows.

G.H. ZEAL, LTD.,
75 & 77, St. John St., London, E.C.1.

WILSON

Surgical
Industrial &
Household

SUPPLIED TO THE TRADE EXCLUSIVELY



R. Blakar

11, CANUTE RD.
SOUTHAMPTON

"The temper of
Finest Steel"

GLOVES

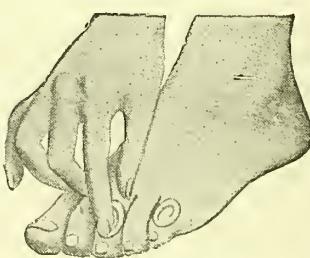


Dr. SCHOLL'S ZINO PADS

For Corns, Bunions,
and Callouses.

Being simple to apply, effectual in use and heavily advertised, they have secured the major part of the enormous and increasing demand for corn, bunion and callous remedies.

Put one on—the pain is gone.



Dr. Scholl's Zino Pads remove the cause, prevent all chafing and rubbing, are self adhesive—require no strapping, are applied in three seconds and do not come off even when bathing. Retail price per box 1/3

Write for Illustrated Catalogue.

The SCHOLL MFG. CO. LTD., 188/194 St. John St., London, E.C.1.

de Luxe

ART. SILK BANDAGES

Crêpsyl

(WOVEN CRÊPE)
Dainty and ideal for understocking wear.

BANDAGES—widths 2in. to 4in. 1/8 to 3/4 ea.
BINDER—widths 4in. to 15in. 3/4 to 12/6 ea.

Beware of imitations and copies.

There is only one Crêpsyl Bandage, and only one Silwick. Passing off is illegal.

Silwick

(WOVEN STOCKINETTE)
Ideal for Varicose Veins.
Bandages 2/- to 4/- ea.
Binders 4/- to 15/- ea.

ALL BINDERS REINFORCED TO PREVENT SAGGING. SAMPLE CUTTINGS FROM MAKERS.

H. W. LAKE LTD.
6 & 7 C.D. Redcross Street
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Always keep a display of

NORVIC

BLUE CARTON
CRÊPE BANDAGES

Cost	2"	2½"	3"	3½"	4"
12/-	15/3	18/3	21/3	24/3	
Sell	1/6	1/11	2/3	2/8	3/-

You will find it pays!

Stocked by all the leading wholesalers



Do You Pack Ointments?

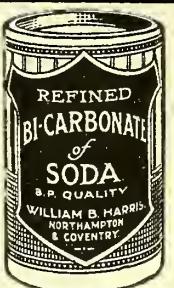
We stock DECORATED TINS for Cold Cream, Boric, Boracic, Zinc, Sulphur, Basilicon, Petroleum Jelly.

Kindly write for free samples and prices.

The Caldicot Tin Stamping Works, Ltd.,
CALDICOT, Nr. CHEPSTOW, Mon.

**ROBINSON'S of
CHESTERFIELD
for
CARDBOARD
BOXES**

ROUND · OVAL · SQUARE · FOLDING

ROBINSON & SONS LTD.
CHESTERFIELD & LONDON**BEADED BOXES**

The boxes illustrated above are finding increasing favour amongst chemists. They are dust-proof and air-tight and of a very attractive appearance. Fitted with a flanged metal lid which is easily lifted out they form a very useful container.

Blank panel on reverse side for printing in Customer's name and address.

ROBINSON & SONS, Ltd.

Manufacturers of ROUND, OVAL, SQUARE AND FOLDING
CARDBOARD BOXES.

CHESTERFIELD

**GARDINER'S
OVERALLS**
For CHEMISTS & DRUGGISTS

SEND FOR NEW ILLUSTRATED LIST.

Jackets and Coats of very superior quality, made from the most reliable materials, smartly cut and thoroughly well finished in every detail.

WHITE DRILL JACKETS ... 6/11, 8/11, 10/6

KHAKI DRILL COATS 6/11, 8/6, 10/6, 12/6, 14/6

WHITE DRILL COATS 7/6, 9/6, 12/6, 13/6, 15/6

BLACK DRILL COATS 15/6

GREY COTTON COATS 7/6

STOCK SIZES : 34 to 44 chest measure over waist-coat. Special pockets and little adjustments can be made without extra charge. **POSTAGE** on single coat 9d., but 20/- orders upwards carriage paid. **SPECIAL PRICES FOR LARGE QUANTITIES.**

GARDINER

& CO. (*The Scotch House*), LTD.

1, 3, 5 Commercial Road, LONDON, E.1

Telephone : Bishopsgate 6751. Established 1839.

BRANCHES :

Deptford, Edgware Road, Woolwich,
Clapham Junction and Knightsbridge.

CELLOPHANE

The ideal transparent wrapping absolutely harmless, air and grease proof, as used by all the leading Perfumers, Soap Manufacturers, etc., etc., for wrapping Soaps, Drugs, Tablets, Bath Crystals, Perfumery, Surgical Dressings, Sponges, Puffs, Soothers, Tooth Brushes and all Articles of Toilet.

Cellophane can be had in sheets, all sizes and colours ; also in the shape of **Bags, Discs, Envelopes** printed or not, allowing the contents to be seen by transparency.

Cellophane wrapped goods look better—keep better—sell better.

Cellophane protects, beautifies, and adds the quality touch.

Prices, Samples and Particulars from
The CELLOPHANE COMPANY LTD.
7, 8 and 9 Bird Street, LONDON, W.1

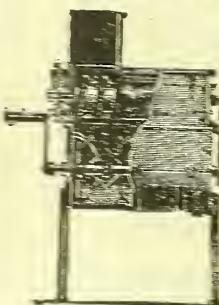
Also 305-7 PRODUCE EXCHANGE, MANCHESTER.
35 MILLER STREET, GLASGOW.

Liquid Paraffin

Sterns S.P.
is guaranteed to be the finest quality of Liquid Paraffin produced. It has the patronage of the largest wholesalers, the recommendation of the Medical profession, and is used in the principal Hospitals in preference to all other kinds.

STERNS LTD.
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Finchley Square,
E.C.2.

perfect blending



Gardner's "Rapid" Sifter and Mixer gives a perfect blend. The special Internal Agitator ensures accurate sifting and mixing of materials, irrespective of the diversity of their proportions; if necessary, $\frac{1}{2}$ oz. can be perfectly blended with hundredweights.

Write us for list of Ball Mills, Disintegrators, Millstones and Mills, Drum Sieves, Drying Machinery, etc.

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Patent "RAPID"
SIFTER & MIXER

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Cables: Gardner, Gloucester.

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WILLS' UNIVERSAL POSTAL SYSTEM

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PRELIMINARY SCIENTIFIC COURSE	£1 10
QUALIFYING COURSE	£1 10
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from The Secretary.

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THE SOUTH OF ENGLAND COLLEGE OF PHARMACY
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Principal: H. LUCAS, Ph.D., F.R.S.
Assisted by a fully qualified and competent staff.

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This course is especially suitable for those candidates who wish to proceed direct to Part II. studies in October 1930, thus avoiding delay, and saving money one year in the payment of fees. Entry New Being Booklet.

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QUALIFY IN OPTICS

PRACTICAL WORK. Students taking the course may receive personal tuition in the practical work AT ANY TIME DURING THE COURSE.

Exams. Tutors for the SIGHT-TESTING DIPLOMAS of the Western and Central Councils of Opticists (P.S.M.C.); the British Optical Association (B.O.A.); the National Association of Opticians (N.A.O.), or the College of Optics (F.C.O.).

Write for full particulars—

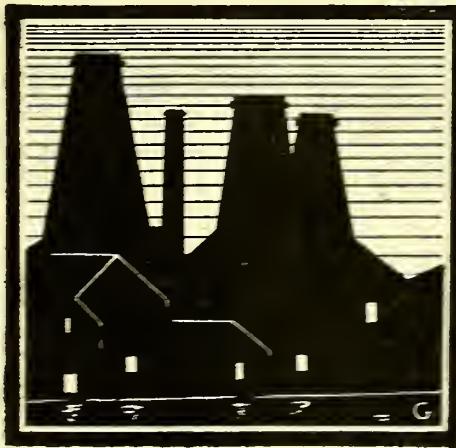
O. A. SQUARR, M.P.S. F.S.W.C. F.E.O.A. F.N.A.O. B.Sc. F.I.O. F.C.O.
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Particulars of the next Examination for the Fellowship Diploma, Syllabus, Entrance Forms, &c., from the SECRETARY, N.A.O., 130 Princes Road, Liverpool.



Pharmaceutical Glassware of all kinds

DISPENSING BOTTLES
CHEMISTS' SHOP BOTTLES
INFANTS' FEEDING BOTTLES
SOXHLET BOTTLES. EYE-BATHS

Designers & Manufacturers of Glassware
for Perfumes, Cosmetics and Bath Salts

SPRINKLER NECK BOTTLES
WHITE OPAL AND ROSE PINK
FROSTED GLASSWARE

Colours

WHITE FLINT, MEDICAL TINT, PALE GREEN,
ACTINIC GREEN, AMBER, BLUE and ART COLOURS

All our Manufacture is of the Highest Quality

WOOD BROTHERS GLASS CO., LTD.

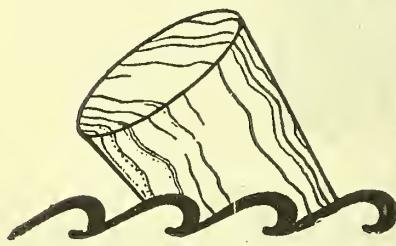
(ESTABLISHED 1828)

BARNESLEY

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EVERY Armstrong Cork is properly graded under a definite name.

Consistency, in quality and dimensions, enables you to obtain identical supplies at all times.

Armstrong Corks are guaranteed by a firm with a 66 years' reputation to maintain.

The Armstrong Grades are:—

GOLD LEAF BRAND

SILVER LEAF BRAND

BLUE LEAF BRAND

GREEN LEAF BRAND

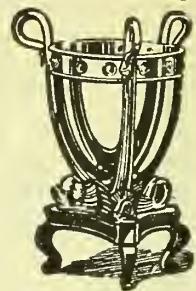
and N. H. I. BRAND

*Write now for samples
and quotations.*

**ARMSTRONG
CORK CO., Ltd.**

Aldwych House,
ALDWYCH,
LONDON,
W.C.2

In the last
5 years
the sales of



TOWN TALK

LIQUID SILVER POLISH
& SILVER PLATE CLOTH
have increased
3 Fold

Get your share of the trade by ordering from

JAMES WOOLLEY, SONS & CO., Ltd.,
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Morphine, Diamorphine (Heroin), Cocaine, Ecgonine, Medicinal Opium, Indian Hemp, Dihydro-Oxycodineone and Dihydrocodeinone Register, 48 pages, 4/-

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Larger size for Wholesale Trade. Prices on application.

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(REGISTERED TRADE MARK.)

The perfect Seal and Reseal for Glass and Tin Containers. British made throughout at our own works, Charlton, S.E.7.

KORK-N-SEAL LTD.

Manufacturers of Aluminium and Decorated Tin Closures of every description.

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Telephone : Temple Bar 6680.

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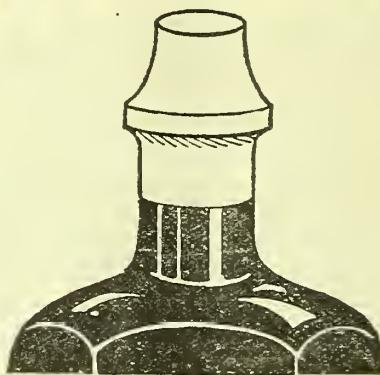
DRY BOTTLE CAPS

Superfine
Self-sealing
Distinctive

All sizes and
colours, Clear
& Opaque

"ADAPTOCAPS."

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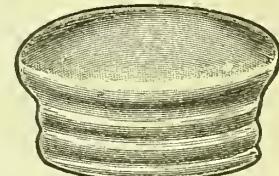
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SCREW CAPS

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Including Nickel Silver and
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LARGE STOCKS OF
**MACHINE-MADE DISPENSING
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LOW PRICES QUOTED ON APPLICATION.

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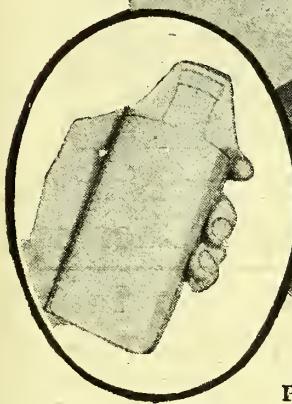
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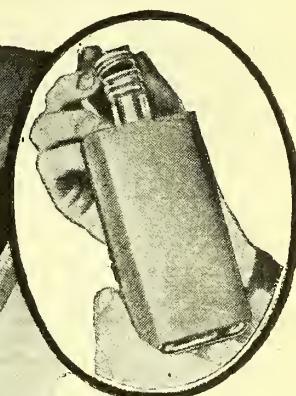
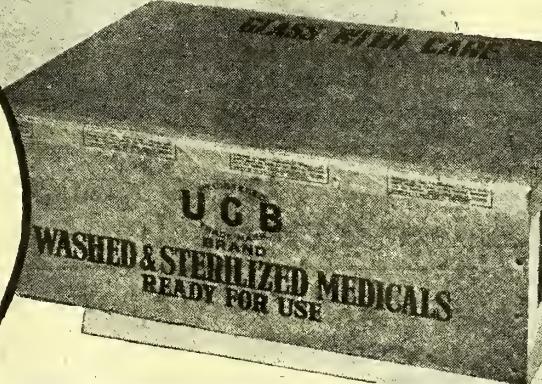
Photograph of actual pack-
age of Cork-mouth bottles
with cover removed.

Washed & Sterilized —
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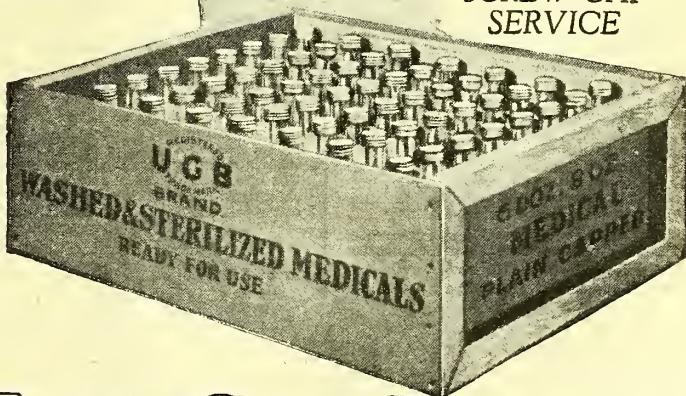
CORK MOUTH
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Packed in sealed non-
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DISTRIBU-
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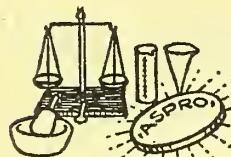
The largest manufacturers of Glass Bottles in Europe.

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The 'ASPRO' Review



17% Extra Profits.

"British to the Core" New Series Display Features.



Beautiful New Display Features Printed in Natural Colours for Exclusive Showing by British Chemists

ACCEPTING the advice of a number of leading chemists to provide high-class display features we have pleasure in announcing the completion of a new series, exclusively produced for chemists.

The illustrations on these pages represent actual photographs of cut-outs just received from the printers. The size of each is approximately 22 by 14 inches, and the printing has been executed in full colour with a gloss finish. The composite display shown below is a folding combination in group form of the same figures and has been produced to place on counters, shelves, and in corners and recesses.

From the point of artistic value these displays will not only attract attention, but they will add tone to your display work—give an undeniably impression of progression—and the 'ASPRO' messages link your store to the largest medicine advertising campaign in the world.

Simply write or 'phone, and a complete set will be forwarded to any chemist in Great Britain.

There is no doubt that the new displays will further enhance 'ASPRO' sales for chemists. Turn up your ledger and analyse your 'ASPRO' purchases. If YOU ARE NOT BUYING ON OUR BONUS TERMS you are losing an average additional 17 per cent. net profit, so figure out exactly what this extra percentage would mean to you EACH YEAR. With the cost of doing business rising higher year by year, is it good business to MISS an extra 17 per cent. net?

The 'ASPRO' bonus is as follows:—On a one gross order for 10's the bonus is one dozen packets; on half-gross order, $\frac{1}{2}$ dozen packets. Half gross 10's is the minimum order accepted for Bonus purposes.

17% Extra Profit if You buy Your 'ASPRO' Supplies on Bonus Terms

On a one gross order for 27's the bonus is 2 dozen packets, on a half-gross order 1 dozen packets, and on a quarter gross order $\frac{1}{2}$ dozen packets. A quarter gross order is the minimum quantity. There is no bonus on 5's or 6's.

The conditions are that the Chemist who buys on these terms undertakes to display prominently 'ASPRO' advertising matter in his shop window for 14 days, and sell at advertised prices. As 'ASPRO' is so extensively advertised, this action will not only bring customers into the Chemist's shop to purchase 'ASPRO,' but should enable the Chemist's staff to make other sales to these customers. Acceptance of Bonus is considered acceptance of conditions regarding display and selling prices. For Bonuses it is not necessary to buy both sizes at the same time, i.e.,

single lots 6 dozen 10's or 3 dozen 27's will qualify the Chemist.

You order as follows:—We do not sell direct to the Chemist. All our business goes through Wholesalers. Orders may be sent either to your Wholesaler or direct to us. If to us, state the name of your Wholesaler, so that we may forward the order on and the Bonus will be supplied direct by us.

Ordinary prices for 'ASPRO' are as follows:—

3d. size containing 5 tablets 2/3 dozen.
6d. size containing 10 tablets 4/6 dozen.
1/3 size containing 27 tablets 11/6 dozen.
2 6 size containing 60 tablets 21/- dozen.
Less 2 1/2% 30 days.

NOTE.—1/3 size contains 2 extra tablets. The 2 6 size to extra tablets.

'ASPRO' consists of the purest Acetyl Salicylic Acid that has ever been known to Medical Science, and its claims are based on its superiority.

Agents—

GOLLIN & CO. PTY. LTD.
(Aspro Dept.)

SLOUGH, Bucks.

Phone — Slough 608.
No proprietary right is claimed in the method of manufacture or the formula.

ASPRO
REG. TRADE MARK

Made by **ASPRO LIMITED**
Slough, England



Composite Display for Shelves and Recesses.
Printed in Full Colours.

THE CHEMIST AND DRUGGIST

SUPPLEMENT

42 CANNON ST.
LONDON E.C.4

FEBRUARY 15, 1930

This Supplement is inserted in every copy of The Chemist & Druggist.

CHEMISTS' TRANSFERS.

Messrs. Orridge & Co., 56 Ludgate Hill, E.C.

Telephones No.: CITY 2283.

May be consulted at their Offices on matters of Sale, Purchase and Valuation.

1.—LONDON, E.—General Retail and Dispensing Business with N.H.I.; returns last year about £2,050; with net profit from £600 to £650; under management; rent £35; lease 36 years; double-fronted shop, well fitted and stocked; rooms above can be converted into living accommodation; price £1,350 or near offer.

2.—WESTERN SUBURB.—General Retail and Dispensing Business; established many years; returns last year £3,600; corner shop, well fitted and stocked; living accommodation; held on lease; rent £60; sublet £7 10s.; price £2,800.

3.—WEST LONDON (Few Miles Out).—Cash Retail Business; returns, under management, £2,100 per annum; scope for increase; shop well fitted in mahogany and fully stocked; rent £90; sublet £52; price £1,600, or near offer.

4.—ESSEX.—General Retail and Dispensing Business; returns last year exceeded £2,350, with gross profit £850 and net profit £710; attractive, well-fitted shop; good saleable stock; excellent house of eight rooms; freehold may be purchased, or lease will be granted; price to be arranged.

5.—LONDON, S.E.—Modern Drug Store with opening for N.H.I.; returns average £800 per annum, with net profit 40 per cent.; convenient living accommodation; garden; rent £4 monthly; vendor having bought another business must sell at once; price £600.

6.—SOUTH LONDON DISTRICT.—General Retail Business, with N.H.I. Dispensing and Kodak Agency; old established; turnover about £2,000; double-fronted shop in main road; estimated value of stock and fittings about £1,000; good living accommodation; 19 years' lease; price £1,500, or near offer.

7.—LONDON, S.W.—High-class Retail and Dispensing Business; returns exceed £3,000; net profit £650; estimated value of stock and fixtures £1,400; good house; private entrance; held on lease; rent £145; price £2,300, or valuation terms untried.

8.—PEMBROKE.—Old-established Business; very much neglected since death of owner; scope for large increase under personal supervision; double-fronted shop, well fitted in

less. O. & Co. desire to emphasize the necessity of periodical Statement of Account by which means one Profit, the Value of Business, &c., can be determined. Involving as this does the labour of stocktaking and Valuation, it is often omitted and eventually becomes confusion and loss.

mahogany; large house; private entrance; vendor is desirous of selling forthwith and will meet a purchaser reasonably.

9.—SURREY.—Light Retail Business with Optical connection; turnover about £1,600 per annum at very good prices; double-fronted shop in main road position; rent £100 per annum; sublet £70; lease about 14 years unexpired; further details on application.

10.—METROLAND.—Family Retail and Dispensing Business, with small amount of N.H.I.; returns last year £1,976; gross profit £820; net profit £620; estimated value of stock and fixtures £800; living accommodation; rent £75, rising to £100; long lease; price asked £1,500.

11.—HOME COUNTY.—Unopposed light Retail and Dispensing Business; no N.H.I.; established many years; returns £2,100 per annum; extremely good profits; estimated value of stock and fixtures £850; good living accommodation; bathroom; vendor owns the property; price to be arranged.

12.—NORTH WALES.—Retail and Dispensing Business, with Kodak Agency; main street position; returns last year £2,622, with net profit about £700; scope for large increase; single-fronted shop; stock and fixtures estimated to be worth £1,400; rent £75 per annum, or property may be purchased; price £2,000; vendor wishes to retire, and in order to effect an early sale is prepared to allow one-third of the purchase money to remain at 5 per cent.

13.—HOME COUNTY.—High-class Retail and Dispensing Business, with Kodak Agency; returns about £4,000 per annum, with gross profit 40 per cent.; single-fronted shop, well fitted and very well stocked; large house and garden; freehold may be purchased or lease will be granted; price required for business £3,500; stock and fixtures estimated to be worth £2,500.

14.—SOMERSET.—General Retail and Dispensing Business, with Kodak Agency and Agricultural; returns about £1,550, with net profit £400; scope for increase; good living accommodation; low rent; long lease; shop occupies good position and is heavily stocked; price about £1,000.

Messrs. O. & Co. are prepared to undertake these essential duties and make SPECIAL TERMS for such service.

Valuations for Stocktaking

Orridge & Co., 56 LUDGATE HILL, LONDON, E.C.4

FINANCIAL.

EXECUTIVE position with investment. Prominent Pharmacist seeks new field for services and capital; preferably Manufacturing or Export; will entertain any substantial proposition open to full investigation by accountants and solicitors. 5/37, Office of this Paper.

BUSINESSES WANTED.

BERDOE & FISH are in urgent need of sound concerns up to £4,000, and in particular several in or near London with turnovers of about £3,000 or more; cash buyers waiting and tick sales assured; correspondence cordially invited. Transfer offices: 41 Argyle Square, King's Cross, W.C.1.

BUSINESS wanted in Hull or district by young qualified Chemist; net profits about £400 or more; will entertain partnership. Full particulars (in strict confidence) to 19/15, office of this Paper.

THEMIST desires to purchase Business, seaside or country, turnover about £2,000 or more, with a fair amount of dispensing. Particulars (in strict confidence), "Agricola," 4/38, Office of this Paper.

BUSINESS required in or near London; good Dispensing and Family trade; net profits £400 per annum or over. Full particulars (in strict confidence) to "Chemist," c/o William Bott & Co., Chartered Accountants, 80a Coleman Street, E.C.2.

PRIVATE Chemist desires to purchase for cash a sound Retail Business; net profit after all deductions must be over £700; edited figures essential; details in confidence; references given; islands or London district preferred. 22/36, Office of this Paper.

PREMISES TO LET.

FELIXSTOWE.—To Let, with possession, commanding double-fronted Shop with exceptional showroom and storage, 1,000 sq. ft. floor space, situate centre main business thoroughfare just off sea front; good opening for high-class Pharmacy; every convenience for Photographic Agency, etc. Plans and full particulars, W. G. Archer & Co. Auctioneers, Felixstowe.

TO Let, Essex, growing industrial town, population about 5,500, Lock-up Shop in main street; new front and redecorated throughout; all conveniences; at present only one chemist. Apply Wright, Rayne Road, Braintree.

PREMISES FOR SALE.

CHEMISTS; grand opening; double-fronted shop; thousands of new houses; no opposition. Cumberland, King's Parade Stores, Wrythe Lane, Carshalton.

NEWBURY, BERKS.—Best position in town. Freehold Premises, 15 ft. frontage and sideway, 45 ft. depth; well-fitted premises, specially suitable for good-class Chemist; price, freehold, £4,500. Sole Agent, H. F. Dunster, 2 King's Road, Reading.

To Multiple Firms and Others.
Only one Baker in the High Street.
SHOPS! SHOPS!!

SEVERAL splendid Shops, with living accommodation, situated in excellent trading position; suit Chemist, Grocer, Green-grocer, Hardware, Baker, Draper, Butcher, etc.; rents from £120 per annum on lease, or for sale from £1,200 freehold; £200 down, balance £35 per annum, including interest. Full particulars of Messrs. P. Chase Gardener & Co., 269 High Street, Hounslow.

Ernest J. George

3 ST. PAUL'S CLOSE, WALSALL

Invites correspondence from Chemists in England, Wales, and Scotland who would be willing to negotiate the

Sale of their businesses.

An immediate market is available for sound propositions doing £40 weekly and over.

The Larger the Better

The present period would appear to be favourable from price standpoint, and Chemists desirous of retirement or change of locality will be well advised to communicate. All information treated in confidence, and correspondents are assured that their interests will be carefully guarded. If desired a visit could be made. Groups of shops are of interest.

LETTERS SHOULD BE MARKED PRIVATE AND ADDRESSED TO

Ernest J. George

3 St. Paul's Close, Walsall

'Phone : Walsall 3774.

Extract from "THE SCRIPT," January 1930.

NOTES AND VIEWS

"Stocktaking is a necessary condition nowadays for carrying on business. Income-tax people can be an awful nuisance, if not when you are living, to those who survive you when dead. Frankly, our advice is: 'Take stock annually for the sake of your own comfort and business.' It is easy. You have the stocktaking card of the 'C. & D.', which simplifies the business. OUR WAY FROM PRACTICAL EXPERIENCE IS TO CALL IN MR. ERNEST J. GEORGE. WE HAVE TRIED HIM; IT IS ECONOMICAL, AND WHAT A LOT OF WORRY IS SAVED BY HAVING YOUR RECORDS SENT BACK TO YOU COMPLETE.

You may feel glad or disappointed with your business ability, but you have the satisfaction of knowing the truth. You are on the right path, or you must reform. An independent stocktaking is essential for one's business well-being, and we repeat from practical experience THE VALUE OF ERNEST J. GEORGE IS WORTH TEN TIMES WHAT YOU PAY HIM FOR DOING THE JOB AND GIVING YOU A FEW TIPS FOR YOUR BUSINESS HEALTH FROM HIS WIDE AND VARIED EXPERIENCE. Don't do the thing in spasms, but send to 3, St. Paul's Close, Walsall. He has a London Agent, too, at 34 Marksbury Avenue, Richmond, Surrey."

The Association of Manfg. Chemists, Ltd.

Business Agency, Transfer & Valuation Department

**Head Offices—Kimberley House, Holborn Viaduct, London,
E.C.1 (and at 2 Bixteth Street, Liverpool).**

PARKIN S. BOOTH, Valuer. *Phone: City 1261-2-3*

BUSINESSES FOR DISPOSAL

1.—Owner of sole and exclusive rights for the British Empire of various high-class specific pharmaceutical preparations of well-established German firm, wishes collaboration for manufacturing and selling purposes. Preparations well known to the medical profession in this country; capital necessary about £20/25,000; principals only.

2.—PRESTON.—Drug and Photographic Business; premises held on weekly tenancy at rental of £28 12s. per annum, consist of nicely-situated shop with good dwelling accommodation; excellent opportunity for young qualified man, as there is scope for N.H.I.; established 27 years; returns average £8/900 per annum; can be considerably increased.

3.—BRADFORD.—Old-established Retail Family Dispensing Business, situated in good-class residential quarter; no near opposition; returns approximately £1,600; premises consist of large corner shop, nicely fitted and well stocked; excellent living accommodation; price, including property, about £2,000. Full particulars on application.

4.—BLACKPOOL.—Retail Dispensing Business, situate in main road; freehold property for sale; double-fronted shop with good living accommodation, which is let off at £1 per week; business returns average £900 per annum; price for freehold £1,500; stock and fixtures at valuation, approximately £450. (27)

5.—BLACKPOOL (North Shore).—Occupying commanding position in this popular seaside resort, there is for immediate disposal a Retail Dispensing and Photographic Business, with Kodak Agency; large D. & P. connection; 5 years' lease at £95 per annum; returns at present, which could be considerably increased, £1,200; net profit £420; price for quick sale £850, or near offer. (20)

6.—FOREST HILL.—Light Retail Dispensing Business for quick disposal; held on lease with 18 years to run; at rental of £100 per annum, slightly progressive; returns at present time under management amount to £900 per annum, but under personal supervision these could be considerably increased; this is an excellent opportunity for energetic young man; offers in the region of £1,000 will be entertained. (11)

Stocktaking and Valuation of Businesses undertaken at moderate inclusive fee. Chemists are invited to consult us in respect of their requirements in connection with sale or purchase of businesses. Chemists in the North are requested to communicate with our Liverpool Offices.

JOHN BRIERLEY, F.N.A.A.

CHEMISTS' VALUER and TRANSFER AGENT

135 Queen Street, Newton Heath, MANCHESTER

S. Yorks, returns £1,500 p.a., price £650. High Peak, returns £2,000 p.a., price £1,000. Manchester, returns £1,400 p.a., price, with property, £1,100. Also Drug Store, £300.

Valuations by fully-qualified Staff. Tel.: Failsworth 113

CHARLES E. NAYLOR

CHEMISTS' VALUER

**Undertakes Stocktaking and Valuation
of Businesses at Reasonable Charges**

170 Vesper Rd., Kirkstall, Leeds *Phone: Horsforth 324*

MANUFACTURING FACILITIES

AVAILABLE

near London, for Pharmaceutical, Food and other Preparations. Financial assistance possible, 163/755, Office of this Paper.

APPRENTICE WANTED.

APPRENTICESHIP (London, S.E.).—Required, Apprentice for a quick Retail, N.H.I., and Photographic Business; good training given. Apply or write Ascott's Pharmacies, Ltd., Chemists, Head Office, 169 Hemingford Road, London, N.1.

BERDOE & FISH

CHEMISTS' VALUERS AND TRANSFER AGENTS,

41 Argyle Square, KING'S CROSS, W.C.1

(One minute from St. Pancras and King's Cross Stations.)

1.—SOUTH COAST.—Well-established Drug Store in best shopping centre of desirable seaside resort; turnover between £2,000 and £3,000; splendid chance for qualified chemist; price, including large freehold corner shop and house, £4,000.

2.—HERTS.—Good-class Family Retail and Dispensing Business; easily worked; good prices; returns over £2,200; net profit £700; audited books; valuable lease at low rent; beautifully-fitted shop; well stocked; valuation terms arranged, about £2,000.

3.—HOME COUNTY (few miles out).—High-class Family Retail, with small Branch; returns about £4,400, increasing; good profits; long lease; excellent stock and well fitted; price £4,250, or first reasonable offer.

4.—BOURNEMOUTH DISTRICT.—Good-class Business in main road position; turnover £1,400, increasing; modern pharmacy; well stocked; price about £1,000.

5.—ESSEX COAST.—High-class Business, with Kedak Agency, in prominent position; returns over £2,000; large corner pharmacy (lock-up); well fitted and stocked; price £1,300 cash for quick sale.

6.—SUFFOLK.—Light Cash Retail and Photographic Business in main road position of large town; returns £1,000; scope for increase; low rent on lease; stock worth £200; price £350.

7.—BEDS.—Old-established light Retail in busy town; returns, under manager, £1,100; scope for increase; rent £60; on lease; lock-up shop; stock worth £200; price £450.

8.—LONDON (Western Suburb).—Good-class Retail and Dispensing Business in main road position; returns over £2,500; large, well-fitted-pharmacy, fully stocked; long, valuable lease; price about £2,000; recommended.

9.—WEST MIDDLESEX.—Good-class light suburban Business in prominent position; returns £25 to £30 weekly; neglected; plenty of scope; good house and pharmacy; well stocked; price £1,000; worth attention.

10.—LONDON (Surrey Suburb).—Old-established Light General Retail in main road position; returns approach £2,000; books audited; house attached; stock and fixtures worth £925; price £1,500, or offer.

11.—TOOTING.—Sound Light Cash Retail, in main road position; returns last year nearly £1,950; net profit £590; well fitted and stocked; long lease; price £1,350.

Established 1870. Telephone: Terminus 3574.

AGENCIES.

A GENT required for Scotland for the sale of Camera Cases by manufacturers who have competitive lines in canvas and various leathers, on commission basis. Only those with good connection amongst Chemists and Photographic Dealers need apply. 12/6, Office of this Paper.

D EPOTS wanted for first-class Toilet Speciality in every town of the United Kingdom; very liberal discount and every help given; sale or return terms; only progressive Chemists of good standing need apply. Write P.C.B. 30/39, Office of this Paper.

PARTNERSHIPS.

CHEMIST, owning good-class Business (turnover approximately £3,000), West London, but needing capital, wants another to join him in developing business. State particulars and capital at command to 26/16, Office of this Paper.

E XCEPTIONAL opportunity for gentleman, possessing capital combined with good business and administrative capacity, to join the Board of a well-established Wholesale and Retail organisation; preference will be given to candidate who has had responsible experience in both Retail and Wholesale and is seeking general managerial position. State full particulars, age, experience, capital at disposal, and when at liberty. 164/802, Office of this Paper.

Price lists, trade circulars, samples, and printed matter can in no case be forwarded, the Box numbers being intended exclusively for specific answers to particular advertisements. The Publisher reserves the right to open and refuse to forward any communications received which he may consider contrary to this rule.

BUSINESSES FOR DISPOSAL.

6s. for 50 words or less; 6d. for every additional 10 words or less, prepaid.

BRADFORD.—Modern Business, with definite reasons for disposal; can be made into very profitable business; established 5 years; average takings £1,400, certified; new stock, £450 to £500; Kodak Agency; N.H.I. moderate, can be enlarged; usual profits; excellent position for live young man; house and shop at £1 per week; good D. & P. connection; good-class neighbourhood; price £950, or nearest; well recommended. No triflers, please. 22/38, Office of this Paper.

BURTON-ON-TRENT.—Small Factory and Warehouse producing Patented and Registered Proprietary article; freehold, goodwill, stocks and stores; well-appointed and furnished office, situated near Burton-on-Trent; entire business for sale as a going concern. Particulars, 20/38, Office of this Paper.

COVENTRY.—Chemist Business for Sale through illness; old-established; situated centre of city; main thoroughfare; rent £250; on lease; stock and fixtures at valuation; no charge for business. Details, Odell & Co., Auctioneers, Coventry.

FYLDE COAST.—Drug Stores; opening for qualified Chemist; good house, garden, private entrance; shop, double-fronted; well fitted and good saleable stock; main street, near beach; accept £300 for quick sale; immediate possession can be given; premises can be purchased or leased. Reynolds, 1 Grosvenor Street, Lytham, Lancashire.

HOME COUNTY.—Very profitable Pharmacy in main thoroughfare of important industrial and market town; large double-fronted shop, house of 7 rooms, held on long favourable lease; substantial and increasing turnover; good scope for Optics; price £900; stock at valuation; part payment entertained. 24/27, Office of this Paper.

LANCASHIRE.—Chemist's Business; well fitted; good position; tram terminus; nice-class Light Retail and Dispensing; Photography with D. & P.; N.H.I. scripts average 400/450 per month; fitted with electric light and telephone; living accommodation if required; Medicated Wine Licence; opening for Optics; compact and easy to work; price £500 cash; no triflers. 25/10, Office of this Paper.

LIVERPOOL.—Chemist's Business, lock-up; main road; good opening N.H.I.; Kodak Agency; average takings £20 weekly; established five years; make splendid branch; price £525; offers invited. Fahy, 16 Great George Place.

LONDON, W. (middle-class district).—Takings, under manager, £1,600, including large Camera, Photographic and D. & P. trade; small Dispensing; could be run unqualified; has done much more under owner; lock-up shop; rent £55; 7 years' lease; £850, including stock, about £420. 14/4, Office of this Paper.

LONDON, EAST.—Sale owing to death; good opportunity for enterprising man; Chemist and Druggist; N.H.I. and Photography; growing working-class neighbourhood; no opposition; good living accommodation; turnover, under management, £1,138; price £850, or very near offer. 23/5, Office of this Paper.

LONDON, S.E.—Drug Store for Sale in densely populated working-class district, now doing £20 a week; exceptional opening for N.H.I.; further particulars at interview; price for stock, fixtures and goodwill £750. 26/20, Office of this Paper.

LONDON, S.W.—General Retail and Dispensing; main road; returns £1,200, increasing; at good prices; N.H.I. 2,500 per annum; lease 8 years; good house; at present let to cover rent and rates; good clean stock; must sell; price £700, or offer. 25/30, Office of this Paper.

LONDON, WEST.—Working-class Cash Business; high net profit; convenient lock-up shop; bold corner position; long lease; Kodak Agency; Optics and Fancy Goods could be profitably added; excellent opportunity for increase under personal management; price about £850. Write, with references, to BM/VCLL, London, W.C.1.

MANCHESTER.—Smart little Business; main road; Photographic and N.H.I.; double-fronted shop; very thickly populated district; recently established; rapidly increasing turnover; suitable for young qualified man; living accommodation if required; excellent reason for disposal; cheap for quick sale; price asked; fixtures £100, stock at valuation. 26/13, Office of this Paper.

MANCHESTER (Near).—Chemist's Business for Sale; takings average £650 at good prices; N.H.I. 120 per month, increasing; at present under management; double-fronted; electric light; good living accommodation; rent £39 (sub-let £38); rates £21; nearest opposition 200 yards away; situated in well-populated area; fittings include N.C. Reg., etc.; stock £160; would suit energetic young man; price £275 (no triflers, please). 25/17, Office of this Paper.

MID-CHESHIRE.—Comfortable living assured with prospects of increasing; present turnover of approximately £1,000; excellent possibilities with N.H.I. Dispensing; bargain at £950 for quick sale; freehold premises (shop and house) inclusive. 18/4, Office of this Paper.

MONMOUTHSHIRE.—General Retail and Dispensing, Photography, Kodak Agency; average returns about £1,100; in better industrial times nearly double this; good living accommodation; double-fronted shop; well fitted; all in about £1,350 (approximately), premises £750, goodwill £150, stock (at valuation) about £450. Full particulars from 25/36, Office of this Paper.

NORTH OF ENGLAND (Country Town-Holiday Resort).—Retail, Dispensing, Agricultural, N.H.I., Wine and Spirit Licence; returns last year £1,950, increasing; stock £700; fittings, fixtures, licences and goodwill £750; property (house, shop, etc.) £1,400; sub-let £147 per annum. 25/35, Office of this Paper.

SCOTLAND (Dunfermline).—Old-established Chemist's Business for Sale; General Retail and Dispensing; well fitted, stocked; Kodak Agency; living accommodation; property can be bought or rented. Further particulars, 2/40, Office of this Paper.

SUBURB OF WEST OF ENGLAND CITY.—High-class Business, Family, Dispensing and Photographic, with opening for Optical work; all convenience for same; lock-up shop; will sell property or grant lease; applications must be accompanied by bankers' references. "Laryux," 24/18, Office of this Paper.

WILTSHIRE.—Village Business; established 2½ years; turnover over £1,250; N.H.I. £100; net profit £325; exceptionally well fitted; stock over £300; long lease at £26 per annum; rates £8 per annum; some living accommodation; sound reason for disposal; any investigation welcomed; price for quick sale £850. 25/11, Office of this Paper.

YORKSHIRE.—Chemist's Store Business, well situated in large town; large frontage; lock-up; on lease at nominal rental; gross profits over £800 per annum; Kodak Agency and Developing and Printing; N.H.I., 6,000 per annum; well stocked; exceptionally well fitted; Optics and Wines could be added advantageously; price £1,400; bankers' references. 26/1, Office of this Paper.

ADVERTISER, retiring from business, would like to meet with gentleman desirous of a small but genuine Retail and Dispensing Business, delightfully situated on the East Coast; entirely unopposed; population 2,500; returns £1,157 (accountant's figures); no N.H.I.; good house, garden, lawn and garage; inquiries, with bank or trade references; will have attention. 26/14, Office of this Paper.

ADVERTISER wishes introduction to group of Chemists to merge his genuine Dispensing Business; object being more scope, advantage in buying, and change from weariness of "one-man" show; wide experience in all retail, or would sell and bring capital into small "merger"; cathedral city. "South," 22/29, Office of this Paper.

CHEMIST'S Business; select London suburb; unopposed position; good-class trade; freehold or leased on reasonable terms. P.C.B. 31/37, Office of this Paper.

CHEMISTS.—Chiswick; old-established Business doing £36 weekly; good working-class district; lease 14 years; rent £60; five rooms, etc.; well-fitted shop and dispensary; price £1,200, to include £450 stock (accountant's figures). Sole Agents, J. Cooper & Son, 379 High Road, Chiswick, W.4.

FOR immediate disposal, old-established Retail and Dispensing Business, Kodak Agency and Wine Licence, in main road of Midland town; on lease at low rental; exceptionally well fitted and good stock carried; returns about £1,800; price to be arranged, approximately £1,400; owner has other interests. 24/21, Office of this Paper.

SOUND Chemist's Business; 1,000 scripts monthly; Prescribing, Proprietary, etc., with good Optical connection if desired; Midlands; £1,800; property optional; banker's reference; no agents. Apply 25/16, Office of this Paper.

THE opportunity arises to purchase a sound, old-established, high-class Pharmacy, together with adjoining freehold premises, the whole occupying over 2,000 square feet; central position; average turnover £2,800; Home County. Further particulars, 14/12, Office of this Paper.

£300 WILL purchase an old-established Chemist's Business in E. Northants, including fittings (mahogany) and fixtures; electric light, etc.; stock at valuation; in city 80 miles from London; good position; no immediate opposition; owner retiring owing to advancing years. Full particulars to bona-fide applicants only. 21/38, Office of this Paper.

£550 all at, including £275 stock; London, S.E., main road; Chemist Business for Sale; nicely fitted; takings average £1,900 year under management; scope for increase under personal management; lock-up shop; rent £85 inclusive; £400 down, balance after accepted. 26/4, Office of this Paper.

£600, OR NEAR OFFER.—Lock-up Pharmacy; returns last 8 weeks over £50 weekly; capable of large increase; no qualified opposition; no Optics in district; small industrial town, South Wales; been run as branch; rent £1 1s. weekly; sound reason for disposal. 22/26, Office of this Paper.

SITUATIONS OPEN.**RETAIL (HOME).**

6s. for 40 words or less; 6d. for every additional 10 words or less, prepaid.

BRIGHTON.—Lady Assistant; outdoors; Dispensing and Counter. Apply, with full particulars, age, height, salary, photo, references, and state when disengaged, E. R. Jones, 12 Matlock Road, Brighton, Sussex.

HARROW.—Required, at once, Branch Manager; good Window-dresser and tactful Counterman. Reply, stating age and salary required, to F. C. Reynolds, 13 Springfield Road, Harrow.

HARROW.—Hubert Rigden, Pharmacist, Greenhill Pharmacy, Harrow, requires immediately the services of a Junior or Improver for first-class Dispensing and Retail business. Please give full particulars in first letter.

HERTS.—Up-to-date Manager required for Light Retail and Dispensing business; must possess good Merchandising abilities and be a smart Window-dresser; bonus and commission on results offered; state height, age, wage required, and when at liberty. 24/14, Office of this Paper.

LIVERPOOL.—Competent qualified woman Assistant, to take entire charge of Dispensing counter and assist with Packing and Counter when required; state wages, experience, references, and age with photograph. Apply by letter only to Mr. J. Milling, McGuire & Co., 10 Castle Street, Liverpool.

LONDON, W.12.—Young, qualified man for Counter and N.H.I. Dispensing. Please give full particulars, age, height, experience, and salary required to Windwood, Chemist, 96 Askew Road, Shepherd's Bush, W.12.

LONDON, N.—Unqualified young lady Assistant required; must be good at Counter and Window-dressing. State age, wages and references. 20/7, Office of this Paper.

LONDON.—Improver wanted for London Suburb, N.8. Apply by letter, stating age, experience, salary (outdoors), and when free, to J. T. Walters, 13 Old Street, E.C.1.

MANCHESTER AND Salford CO-OPERATIVE SOCIETY, LTD., desire to thank all applicants for the recently-advertised position of Chemist's Qualified Assistant, and to state that an appointment has now been made.

MANCHESTER.—Wanted, qualified Chemist and Optician (J.C.Q.O.) as Manager; accustomed to Window-dressing, Photography and N.H.I. Dispensing; must be energetic and competent; salary £5, plus commission on optics; permanency. Give full particulars as to experience, age, copy testimonials, etc. 23/7, Office of this Paper.

NORTH DEVON.—Capable, unqualified male Assistant required at once, quick and accurate Dispenser, for General Family Retail and Agricultural. Please state fully in first letter, experience, references, age, height and salary required, with photograph (returned) to Dyson, Chemist, Barnstaple.

SHEFFIELD.—Immediately, unqualified Assistant; must have good references; Wholesale experience an advantage. Full particulars of experience, age and salary required, to J. Gilbert Jackson, Ltd., 338 Abbeydale Road, Sheffield.

WARRICK.—Qualified Assistant, junior or lady, for a few weeks; state salary, references, etc. Mellor & Co. (Warwick), Ltd., Chemists.

CAPABLE, experienced, unqualified Dispenser and Counter-man; experienced in all branches of the trade; age 25-35; first-class references essential; permanency if suited. Apply J. Liff, 197 Whitechapel Road, E.

COMPETENT Junior (male) Assistant for Branch; Dispensing and Counter experience necessary; personal application preferred, or if by letter state full particulars and salary required. Wm. Fox & Sons, Ltd., 109-113 Bethnal Green Road, E.2. (Ten minutes' walk from Liverpool Street Station.)

EXPERIENCED Assistant (male), unmarried, 25-30, for good middle-class business, with N.H.I.; must be quick and accurate Dispenser; sound references essential. Write, stating salary required, etc., to R. Seldon, 115 Turnpike Lane, N.8.

JUNIOR male Assistant wanted; smart and intelligent; accustomed to good-class Dispensing and Retail. State full particulars as to experience, age, height and salary. James A. R. Dick, 312 Wimborne Road, Bournemouth.

LADIES, qualified, two required, for up-to-date pharmacies, London (suburb); Dispensing and Counter, chiefly former; must be of good address, possessing refinement, and smartness in appearance and work. State height, salary, and full experience, including apprenticeship. 22/34, Office of this Paper.

PATENT Medicine Dept.—Lewis's, Ltd., Birmingham, require immediately a Female Charge-hand for this department; she must be single, smart appearance, M.P.S., or have served a recognised apprenticeship to the trade. Apply in first instance, stating qualifications, experience, to the Staff Manager.

QUALIFIED Manager wanted for branch in Midland industrial town; Light Counter, N.H.I. and Photographic; salary, plus share of profits; good living accommodation. State age, height and experience, married or single, references, and photo if possible (returnable) to 19/9, Office of this Paper.

QUALIFIED Manager, married, about 30; working-class area; modern shop; seekers of one-year posts need not apply; permanency for sound, capable man; £5 weekly and 10 per cent. net profit, less £1 weekly rent and rates modern flat; improved salary when results justify it. Bayley, 8 Chequers Parade, Dagenham.

SEASIDE RESORT.—Wanted, by good-class Dispensing and Retail Chemists with Photographics, two competent and experienced Assistants for a period of about 10 weeks from July 1 next; permanency if desired, and mutually satisfactory. Full particulars of experience, age, height, salary required, etc., and if convenient enclose photo (returnable) to "Spero," 26/5, Office of this Paper.

SMART Manager for busy branch business; preference to one who will invest; chartered accountant's figures given at interview. 164/807, Office of this Paper.

SMART Manager; Prescribing, Photography; take sole charge residential business, London, S.W.; preference given to one who can invest £500, with view to succession if desired; with or without living accommodation; experience, etc., first letter; interview. 21/36, Office of this Paper.

THE Leeds Industrial Co-operative Society, Ltd., beg to thank all applicants for the position of "Qualified Chemist," and to state that the appointment has now been made.

UNQUALIFIED; under 35; large town, Yorkshire; an exceptional and permanent position open to a man of first-class experience for Counter work. Age, height, married or single, salary required, where apprenticed and full details, including dates of experience in first letter, with copies of recent testimonials and photo. 26/2, Office of this Paper.

WANTED, male Junior Assistant; Dispenser and Counter-hand; outdoor. State age, height, experience, salary required, and enclose photo. C. Rayner, Packhorse Road, Gerrard's Cross.

WANTED, Nurse-Dispenser (lady); no week-day evenings off; Sundays free. Drs. Chamberlain, Wallis & Fisher, 63 Sheen Lane, Mortlake, S.W.14.

WANTED, qualified man to manage old-established Lancashire business, with view to buying same, situated in main street; well stocked and fitted; owner, wishing to retire, would accept £550, which is about £100 less than value of stock and fittings; a good opening for suitable man. 22/39, Office of this Paper.

WANTED, Junior Assistant (male), unqualified, with good Counter experience, in high-class Retail and Dispensing Business; outdoors. Apply with full particulars, to A. H. Price, Pharmaceutical Chemist, 2 Guildford Road, Woking, Surrey.

WANTED, young Qualified Assistant, lady preferred, for good Country Business. Herrod, Wisbech, Cambs.

YOUNG lady required as Surgical Fitter; permanent position; London. Apply, stating age and salary required, to P.C.B. 31/30, Office of this Paper.

YOUNG Lady or Gentleman Improver or Junior wanted. Apply, stating age, salary required, etc., to C. A. Seates, 76 London Road, Clapton, E.5.

WHOLESALE.

EXPERIENCED Wet Counter-hand required for Gidea Park Works; manufacturing experience an advantage; age not over 35. Write, giving full particulars, to Stafford Allen & Sons, Ltd., Cowper Street, E.C.2.

MATTE REAL SOUTH AMERICAN TEA (*Ilex Paraguayensis*).—Active Representatives required to sell this product, as side line, on commission, to Chemists, Health Food Stores, etc. State area covered and connection to 164/801, Office of this Paper.

PART- or whole-time Representatives required, London and various parts United Kingdom, for Bathing and Fancy Rubberware and Fancy Goods; commissions 10% to 12½%; expenses; excellent connection Stores essential. P.C.B. 30/15, Office of this Paper.

PILL MAKER.—A thoroughly competent man in making and coating from beginning to finish and having a knowledge of best machinery wanted by a Wholesale Drug House in Yorkshire who purpose adding this department. Fullest particulars (experience, references, age, etc.) to 164/803, Office of this Paper.

PROVINCIAL Manufacturers of Malt Extract, General Chemists' Packed Lines and Soluble Essences have vacancy in their works for qualified Chemist with practical knowledge of the business; applicants must also have ability to organise and supervise staff. References and all particulars, with salary required, to 164/800, Office of this Paper.

REPRESENTATIVE, with first-class connection amongst Departmental Stores, Chemists and Hairdressers, able to drive car, wanted immediately for Lancashire, Yorkshire and Northern Counties by well-known high-class Cosmetic House; only men of good appearance and address, with first-class sales records, need apply. Write Box No. 884, W. S. Crawford, Ltd., 233 High Holborn, W.C.1.

"WHY NOT BE A SALESMAN?" It's a healthy job one with fine prospects." This was the advice given to a man who was dissatisfied with his earnings and could see no future. The friend introduced him to Mr. Wallace Attwood, and to-day he is drawing £600 a year. Suitable men can be trained by Mr. Attwood by post in their spare time. Salesmanship is one good way to help a square peg to leave round hole and better himself. Salesmanship is one of the big professions of to-day. A very interesting book, *The Profession of Salesmanship*, will be sent to you post free on request. Send for your copy to-day. **The Wallace Attwood College**, Dept. C.D., 26 Bedford Row, London, W.C.1. (Phone: Chancery 7526.)

SPEAKING ITALIAN.—A well-known firm has a vacancy for a young man, age not more than 30, who has had a sound business training and experience; fluent Italian is an essential and a knowledge of pharmaceutical business desirable; fullest particulars of education and experience must be given in the first application; the post is good and with excellent prospects for a man of energy, integrity, and loyalty. Address 164/809, Office of this Paper.

TINCTURE ROOM.—Man with experience in the making of Tinctures required immediately; permanency. State age, experience, and wage required (in confidence), to Goodall, Backhouse & Co., Leeds.

SITUATIONS WANTED.

RETAIL (HOME).

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid.

A.A.A.A.—QUALIFIED Manager; West-End experience; abstainer; age 25; tall and energetic; at liberty February 17. "Phone: Brixton 5931.

A.A.A.A.—QUALIFIED; 23, tall, good appearance, competent in all branches, including Optics (F.C.O.), Photography and Surgical Fitting; interview; disengaged. Reid, c/o Tofts, 14 Bruntsfield Avenue, Edinburgh.

A.A.A.A.—I am experience-hunting; salary is a secondary consideration if a congenial position with good experience is available; age 26, qualified, and have had nine years' varied Retail experience; would prefer Newcastle or Sunderland area. Offers and particulars to 26/10, Office of this Paper.

A.A.A.—STUDENT (temperate) seeks evening duties only; any reasonable salary acceptable; extra time to suit employer entertained; London only; conscientious worker; 11 years' experience, also National Health Insurance; would gladly consider purchase of business on qualifying. P.C.B. 31/16, Office of this Paper.

A.A.A.—EXPERIENCED Manager and Buyer; 35; tall; disengaged. "Qualified," 39 Durnsford Avenue, Wimbledon Park, S.W.19.

A.A.—(27) Qualified Chemist, F.S.M.C., J.C.Q.O., keen and conscientious, Windows, Counter, Photography, Toilets, etc., desires position with Chemist or Chemist-Optician; London or large city; disengaged. "L. D." 30 Albany Road, Cardiff.

CAPABLE qualified Pharmacist, 23, seeks situation requiring hard work and initiative; excellent references; disengaged; London and district. Moss, 89 Osbaldeston Road, N.16.

CAPABLE, qualified and experienced Chemist seeks immediate post; permanency or Locum; moderate salary. "Chemist," 415 High Road, Leytonstone, E.11.

CAPABLE M.P.S.; disengaged; Locum (any distance) or permanency; all-round, including Institution, experience; rapid Dispenser; abstainer; excellent recent references. "Statim," 156 Clapton Lower Road, E.5.

JUNIOR, 20, tall, Part I, seeks berth in Dispensing business; outside London; references good; salary £5 5s.; free immediately. 164/809, Office of this Paper.

QUALIFIED Chemist, experienced, requires part-time evening work; West-End or near vicinity. "Peps," 14 Clitheroe Road, Stockwell, S.W.9.

QUALIFIED man, 30, married, tall, good appearance, reliable, steady, 5 years one firm, requires position good-class business, London. "C. W. M." Harrow Post Office.

QUALIFIED Lady, with excellent Dispensing, Counter and Photographic experience, desires post in or near London. 25/20, Office of this Paper.

SMART and efficient Assistant, unqualified, 25, desires permanency or Locum; all-round experience; excellent references. Jones, 23 Marlborough Road, Wealdstone, Harrow.

YOUNG Qualified Pharmacist, of good address and appearance, desires engagement; excellent all-round Dispensing, Counter, Window-dressing and Photographic experience. Photo and full particulars on application. "Sinigrin," 74 St. Helier's Road, Cleethorpes, Lincs.

A BLE Salesman; qualified; 25; front counter or managerial; London experience; any responsibility; excellent references; free. "Fernlea," Bryncethin, Glamorganshire.

A experienced and capable London Manager-Buyer desires charge of live good-class business, central district; disengaged; highest references. 25/22, Office of this Paper.

A Manager to Chemist requiring to take things easy, view to succession; managing present business 10 years; turnover now £7,800, was £2,500; London suburb preferred; modern store experience for 25 years, all with one firm; excellent references; age 43. 20/15, Office of this Paper.

A SSISTANT, unqualified, 35, tall, at liberty, desires permanent; best all-round, high-class West-End experience, with Foreign Dispensing and Proprietaries; interview when convenient. 21/53, Office of this Paper.

A SSISTANT; unqualified; experienced; temporary or permanent; London; can manage. "Statim," 72 Tremadoc Road, Clapham, S.W.4.

A SSISTANT or Locum; Dispensing, Counter, Photography; experienced; active; unqualified. "K." c/o Hadfield, M.P.S., 108 Butcher's Road, Custom House, E.

A SSISTANT; unqualified; 27; excellent Dispenser, also Counter, Photography, Store experience; good references; disengaged. Whitaker, 80 Sudbourne Road, Brixton.

A SSISTANT; unqualified; best experience; worker; good references; town or country. "Radix," 7 Regent Place, Westminster, S.W.1.

A SSISTANT.—Energetic young Scot, unqualified, desires experience in good-class pharmacy; London or district preferred; competent Dispenser, smart Salesman; abstainer; disengaged. Apply "Statim," 149 Regency Street, Westminster, S.W.1.

A SSISTANT, unqualified, capable, trustworthy, steady, Dispenser, N.H.I. experience, desires post; good references; recommended. 364 Dickenson Road, Longsight, Manchester.

A SSISTANT, unqualified, requires situation; thoroughly experienced in Dispensing. Cotton, Church Street, Newlyn, W. Cornwall.

A SSISTANT, tall and capable, 11 years' all-round experience, desires change; South Coast preferred; invest if necessary; unqualified. 24/32, Office of this Paper.

A SSISTANT in good-class business; several years recent berth; Dispensing, Counter and Veterinary experience; good appearance and address; unqualified. 25/54, Office of this Paper.

B RANCH Manager or Senior; daily reach Chatham preferred; lady; 35; qualified 9 years; courteous; obliging; quick and accurate Dispenser and Salesman; excellent London and provincial experience; free shortly. 22/27, Office of this Paper.

C APABLE Manager, qualified, requires position; fully experienced; eight years last post. "Chemist," 43 Stamshaw Road, Portsmouth.

C APABLE, unqualified, married Assistant, tall, Scot, 20 years' Dispensing, Counter, Photo, six years recent berth; desires permanency; disengaged; highest references; photo. Johnstone, 3 Bahington Road, Streatham, S.W.16.

CHEMIST, qualified (37), accustomed management of good-class pharmacy, desires responsible post; London; first-class references; Scotland and West-End; interview. Apply to "Bachelor," 24/16, Office of this Paper.

DISENGAGED; 55; unqualified; exceptional varied experience since first-class apprenticeship; moderate salary. "Chemist," 91 Duncombe Road, Holloway, N.19.

DISENGAGED; Qualified Chemist-Optician; highest references; capable; good Photographic knowledge; seven years' business experience; abstainer. Sargent, 6 Birchfield Road, Northampton.

DISENGAGED; qualified; brisk Panel, Counter and all-round experience; locum or permanent; active; abstainer; elderly; first-class references. "Pharmacist," c/o Mr. Crick, Chemist, 122 Brayford's Road, Peckham, S.E.

DISPENSER, good references, unqualified, experienced, desires practice, Saturdays only; shop with large dispensing business; salary secondary consideration. "Dispenser," 49 Redburn Street, Chelsea, S.W.3.

ENERGETIC young man (unqualified) desires post as small Drug Stores Manager or similar responsible position; used to taking complete charge; 8 years' high-class Retail and Wholesale experience; excellent references. Write "Bee," 48, Grasmere Road, S.E.25.

EXPERIENCED lady Dispenser seeks post; Doctor, Chemist or Institution; capable; used to country shop; Agricultural and Horticultural. C/o Chemist, Willingham, Cambs.

EXPERIENCED Qualified Manager, 35, requires responsible and progressive position, London district; accustomed to absolute control; immediate release. 25/15, Office of this Paper.

IMMEDIATELY; Assistant; unqualified; age 30; 12 years experience; Photography, Counter, Dispensing, Window-dressing, Optics, Retail or Wholesale; excellent references; total abstainer; trustworthy. "Chemist," c/o 26 Beckway Road, Norbury, S.W.16.

JUNIOR; good experience and references; Chester or district preferred. Evans, Medical Hall, Penmaenmawr.

JUNIOR Improver; three years' apprenticeship; immediately; all-round experience; capable; Bristol or district preferred. Wright, 91 Commercial Street, Seughenydd.

JUNIOR; 22; first-class Dispensing experience; good references; disengaged. C. Hunter, 7 Redburn Street, S.W.5.

LADY Dispenser (Hall qualification), wishing to gain experience, seeks situation with Chemist or Hospital; S.W. district preferred. 26 Lytton Grove, Putney Hill.

LADY; qualified; 22; experienced Dispenser; General Retail; engaged at present, but free any time for suitable post. Sexton, c/o Plomley & Alldis, Fife Road, Kingston. Phone 0415.

LADY Dispenser (Hall) Secretary desires post with Doctor; 6 years' experience; good testimonials; East or Southern district preferred. 22/37, Office of this Paper.

LADY; unqualified; 12 years' experience; Dispensing, Counter, Photography; excellent references; disengaged February 17. E. M. Row, 35 Rathfern Road, Catford, S.E.6.

LADY (23); qualified; good Dispenser; Photographic experience; excellent references; Notts district preferred. 35 Melton Road, West Bridgford, Nottingham.

LADY (qualified), 21, tall, requires position in good pharmacy; experienced Counter, Dispensing, Photography. Anstis, 11 Llanlaiy Road, Llantrisant.

LOCUM or for season; qualified; good experience; disengaged end February. "P. H." c/o "Bon Chance," Stechford Lane, Ward End, Birmingham.

LOCUM work for any period (one day to two months) wanted by registered New Zealand Pharmacist, with Canadian and American experience; any position and any salary acceptable for experience; good references; 28 years age. P.C.B. 51/56, Office of this Paper.

LOCUM, qualified, single, 32; as Manager or Assistant; disengaged. "Chemist," 50 Grove Lane, Camberwell, S.E.5. Tel.: 4449 Rodney.

LOCUM; open to immediate offer; 30 years' experience, town, country; highest references; satisfaction guaranteed. "Chemicus," 56 Rudloe Road, S.W.12.

LOCUM; Relief; Manager; "not registered"; 20 years' experience; Panel, Counter, Prescriber, Salesman. "Smart," 130 Scott-Ellis Gardens, N.W.8.

MANAGER or Assistant, 37, qualified, single, desires permanency or Locum; all-round experience. Smith, 72 Strahan Road, E.3.

MANAGER; qualified; disengaged February 14; aged 58 years; capable and industrious; excellent references; abstainer. "Pharmacist," 16 Blacklands Road, Catford, S.E.6.

MANAGER, qualified, business man, 25 years' experience; first-class references, desires post in E.C. or East London suburb. 24/30, Office of this Paper.

MANAGER, qualified, married, keen and energetic, satisfactory references, disengaged, thoroughly trustworthy and experienced in all branches retail, requires permanency in good-class pharmacy; partnership or succession entertained; interview. 24/54, Office of this Paper.

M.P.S., Public School man, requires situation in London; excellent references. "H. G. H." 114 Narbonne Avenue, Clapham, S.W.4.

M.P.S., 34, desires post as Manager (London); experienced; good references; succession entertained. "Chemist," 4 Grove Park, Denmark Hill, S.E.5. Telephone: Brixton 6972.

M.P.S., 6 years' experience, good Dispenser and Counter-man, good French, knowledge Spanish, height 5 ft. 10 in., requires post; trustworthy. Haryott, 50 Chelsea Road, Southsea, Hants.

M.P.S., 35, town and provincial experience, desires post as Manager, Assistant or Locum; highest references and testimonials; disengaged end of February. 26/40, Office of this Paper.

PART-TIME or Relief; chiefly Dispensing preferred, but much experience other branches; inexpensive. "K." 52 North Street, S.W.4.

PART TIME; qualified; evenings and/or week-end; Liverpool, Birkenhead, Wallasey. 25/24, Office of this Paper.

PART or whole-time Assistant; unqualified; Birmingham preferred, but not essential; good references. Goodwin, 24 Springfield Road, Kings Heath.

PHARMACIST, 23, good Retail experience, London suburbs, Public School, neat appearance, excellent references, enthusiastic, requires situation, preferably in London area. Phone Wool. 1303, or write Green, 13 Hinstock Road, Plumstead, S.E.18.

QUALIFIED Locum or Manager; competent; reliable; over 20 years' varied experience, mostly West-End; disengaged. "Pharmacist," 81 Camden Road, N.W.1.

QUALIFIED, 35, 18 years' experience all branches, London and country, desires permanent progressive post; used anaging, responsibility; good references and appearance. "Chemist," c/o Andrews, 23 Clapton Common, E.5.

QUALIFIED, 25, keen, capable, fully experienced in all branches, requires position; excellent references. Write Box 5058, Samson Clark & Co., Ltd., 57 Mortimer Street, W.1.

QUALIFIED, 23, 5 years' experience, Dispensing and Counter, seeks situation as Assistant or Manager of small branch. Jas. Tayler, 46 Grattan Place, Fraserburgh, Aberdeenshire.

QUALIFIED, 27, married, desires position as Manager; highly experienced in all branches; undeniable references; energetic and ambitious; managing; at liberty when suited. "Chemist," 80 Western Road, Southall, Middlesex.

QUALIFIED, 27, desires permanency in West London or City; Manager or Assistant; 8 years' good all-round experience, including London; good references; free March 10. "Ellie," 86 St. George's Road, Victoria, S.W.1.

QUALIFIED lady, 22, desires post in London; good all-round experience in Dispensing, Counter, Photographic; interview. 24/3, Office of this Paper.

QUALIFIED, experienced Manager, married, disengaged, desires permanent post; excellent credentials; West-End and suburban experience. Apply P.C.B. 31/33, Office of this Paper.

QUALIFIED lady required post as Manageress or Assistant; London, S.W.4, preferred; excellent references and experience. P.C.B. 32/2, Office of this Paper.

QUALIFIED desires London engagement; age 38. Rowe, "Cranstock," Park Avenue, West Wickham, Kent.

QUALIFIED, young, desires position as Junior; 3 years' all-round apprenticeship; experience in good-class pharmacy; N.H.I.; excellent references; salary, what offers? "G." "The Manse," Fordham, Ely, Cambs.

QUALIFIED male, 22, desires position in London; one which gives time for Optical study preferred. "Chemist," 67 Bedford Road, S.W.4.

QUALIFIED, 24, London and Provincial experience, desires change; Hospital or West-End preferred; excellent references. 24/57, Office of this Paper.

QUALIFIED (23), with London and provincial experience, requires post in good-class Pharmacy where there is opportunity of obtaining knowledge of Optics; free one month after engagement. 26/22, Office of this Paper.

TEMPORARY position or relief work required; qualified; 24; high-class experience; London, Midlands or Manchester. 8 Patrick Road, West Bridgford, Notts.

UNQUALIFIED Assistant, age 27, tall, free Counter and Dispensing. Tuck, 71 Wellesley Road, West Croydon, Surrey.

UNQUALIFIED, 27, tall, ten years' experience; four years' London, West-End and Suburban, desires post London. P.C.B. 31/32, Office of this Paper.

UNQUALIFIED Lady Assistant requires post immediately; 12 years' experience; conscientious and trustworthy. 114 Lewisham Road, Lewisham, S.E.13.

UNQUALIFIED Assistant; married; permanency; reliable Dispenser; all-round experience; good references; free now. "W." 50 Halesworth Road, Lewisham.

UNQUALIFIED, 23, desires post for about three months; excellent references and experience. 24/20, Office of this Paper.

WEST YORKSHIRE.—Yorkshireman, qualified, 28, married, present managing branch, desires similar position, pleasanter locality; comprehensive experience, including Harrogate; quick, systematic worker; Dispensing, Photographic, Buying, Windows. 23/6, Office of this Paper.

YOUNG, experienced German Chemist, very good family, wanting to learn English Chemistry, and change places with Englishman to learn German or German Chemistry; change preferable, or would attend chemist's daily, boarding elsewhere. 19/21, Office of this Paper.

Z.Z. —EXPERIENCED Assistant or Relief; moderate salary; Dispensing, Counter, Windows; unregistered. "Bismuth," 262 South Lambeth Road, S.W.8.

WHOLESALE.

DOCTOR-PHARMACIST, age 41, at present in very successful general practice, is desirous of JOINING THE STAFF

of a reputable Firm of Manufacturing Chemists, preferably with a view to a seat on the Board; capital available; excellent references. 6/12, Office of this Paper.

A SALESMAN-REPRESENTATIVE, 25, first-class experience, with a sound London and South Coast connection, open to represent leading house; good appearance; references; salary and expenses basis. 22/28, Office of this Paper.

A DVERTISER, thoroughly experienced export trade, desires position with firm of repute; excellent correspondent and knowledge of foreign markets. 24/33, Office of this Paper.

CHEMIST desires arrangement with good up-to-date firm handling Packed Goods, under which he could submit ideas for new lines. Terms to 164/808, Office of this Paper.

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S. E. HACKETT, 23 July Road, Liverpool

EXPERIENCED Representative, with own car, is open to negotiate with Manufacturing House; wide connection Chemists, Stores, etc. 24/350, Office of this Paper.

EXPERIENCED Salesman (Chemist, qualified), well known in Scottish area, is open to represent good Drug or Sundries House in Scotland; terms open to arrangement; able to drive car; residing in Glasgow. 23/35, Office of this Paper.

ENERGETIC young man; eight years' Wholesale and Retail experience; excellent references; willing to do anything requiring initiative and commonsense. Write "Bee," 48 Grasmere Road, S.E.25.

GENTLEMAN, with good Retail experience, desires post as Representative with business house doing business with Chemists and others. 19/16, Office of this Paper.

GOOD commission wanted; own car; London and suburbs. Oakwell, 7 Thrale Road, Streatham, S.W.16.

LEEDS.—Educated, qualified man, 27, desires post in Wholesale or as Representative to firm of repute; can offer undeniable references; 12 years Retail; at present in high-class pharmacy. Write (in confidence) 21/31, Office of this Paper.

MANUFACTURERS of Proprietaries and known lines require sales from Yorks, Notts and East Lancashire territories, write for particulars; 15 years' live and valuable connection with Chemists, Stores and Hairdressers. Why pay heavy expenses and salaries when you can have sales and service on commission only? My method is payment by results. Unknown and new proprietaries £2 weekly required towards propaganda expenses. Full particulars, 25/5, Office of this Paper.

M.P.S., to travel Lancs, North Wales and Cheshire, desires well-known Proprietary; commission basis. "Salesman," 24/26, Office of this Paper.

REPRESENTATIVE, 40, excellent connection London and South of England, desires to represent leading house; Proprietaries or Toilets and Perfumery; own car if necessary. 21/39, Office of this Paper.

REPRESENTATIVE, 10 years' London connection Wholesalers, Stores, Multiple Shops, etc., desires post with Manufacturer or Factor; splendid opportunity to enlist services of really first-class salesman; exceptional sales record. P.C.B. 32/10, Office of this Paper.

REPRESENTATIVE, with 20 years' experience of the trade, Wholesale and Retail, desires engagement in the London area; highest references; own car. P.C.B. 31/39, Office of this Paper.

REPRESENTATIVE, competent and effective salesman, 11 years' experience, sound personal connection nine Eastern Counties; 7 years prominent Perfumery House, excellent reference, good knowledge and previous connection South Coast, age 36, own car, open for engagement; salary, commission and expenses, or equitable arrangement. 25/6, Office of this Paper.

SOUTH Coast Traveller desires profitable side line; calling on Chemists. Write 25/39, Office of this Paper.

TRAVELLER, own car, connection London, South-Eastern and Home Counties, desires to represent well-known house; 10 years' experience; good references. 26/21, Office of this Paper.

SALES AND/OR PROPAGANDA MANAGEMENT.

If you require a responsible and efficient man for the above post it will be in your interest to communicate with advertiser, who is fully medically trained and has had several years' experience of successful sales and propaganda work, regarding highly scientific preparations among doctors, hospitals and chemists over the whole country. 8/14, Office of this Paper.

YOUNG man, unqualified, requires progressive situation in London Wholesale House; 4 years' Wholesale and Retail experience; disengaged; excellent references. P.C.B. 31/2, Office of this Paper.

YOUNG Gentleman, age 25, Part I, three years' Retail, 3½ years' Manufacturing, desires position with prospects; not afraid of work in any capacity. "F. J. R. M." 15 South Side, S.W.4.

FOR SALE.

FIXTURES, Fittings and Stock of Drug Store for Sale; everything clean and saleable; quick sale. 26/53, Office of this Paper.

PINDAR Improved Pill Rounding and Finishing Machine, with latest improvements, suitable for hand or power; almost new. Write "Nev." 23 Arrol Road, Beckenham, Kent.

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CHEMISTS' FITTINGS.—Silent Salesman Cases, Drugfittings, Wallcases, Dispensing Screens, glass-front Counters, Perfume Cases, Window Enclosures, Glass Shelves, Mirrors, Counter Drawers. Before you decide send to GEORGE COOK, the well-known Chemists' Fitter, 27 Macclesfield Street, City Road, London, E.C.1. 40 years' experience.

COSTING £360, 1926, complete exceptional light oak fittings, Drug Fitting, 14 ft., including 3 Showcases; Wallcase, 12 ft.; Dispensing Screen, 7 ft.; Glass-fronted Counter, 10 ft.; Silent Salesman; Glass Counter Case, 53 in.; Scent Show Case, 2 full-length mirrors; Dispensing Counter and Shelves; Window Equipment and 3 large Mirrors; what offers? P.C.B. 32/8, Office of this Paper.

LIMITED COMPANIES REGISTERED.—I have now been engaged in this work over 20 years, so you may rely that my experience in Chemist and other Companies (I take all trades) is hard to beat. Most reasonable and inclusive fee. Advice free. A. B. SLACK, 15 Christ Church Avenue, West Didsbury, Manchester.

SECOND-HAND CHEMISTS' FITTINGS.—We have an exceptionally fine selection of these in all sizes; prices are right, and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, RUDDUCK & CO., 219 Old Street, London, E.C.1.

£80.—10 ft. DRUG FITTING, complete with drug drawers, cupboards, lockers and shelving; 6 ft. Dispensing Screen; 8 ft. glass-fronted Counter, with nest of drawers at back; 6 ft. Wall Showcase. Mahogany and only shop soiled; packed and f.o.r. Can be seen at or full details with sketches from PHILIP JOSEPHS & SONS, LTD., 90/92 St. John Street, Clerkenwell, London, E.C.1. "Pharmacy Fitters for over a Century."

£82 10s. for Set of Mahogany Fittings, comprising 10 ft. Drug Fitting (fitted 50 drawers with glass labels and knobs), 10 ft. glass-fronted Counter, 6 ft. Wall Case, 6 ft. Dispensing Screen, Perfumery Case and Desk. Illustrations on request. F. MAUND & E. BERG (SHOWCASES), LTD., 175/9 and 336 Old Street, London, E.C.1.

£90 FOR COMPLETE SET OF Main Fittings, comprising: 10 ft. Drug Range, complete with 30 drawers with bevelled edge glass labels and two poison cupboards, shelves and lockers; 10 ft. glass-fronted Counter with drawers at back, 6 ft. Dispensing Screen, 6 ft. Wallcase, Perfumery Desk and Case. We have erected a complete Chemist Shop in our Show Rooms. 40-page Catalogue on request. D. MATTHEWS & SON, Chemist Shop Fitters, 14/16 Manchester Street, Liverpool.

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FOR DISPOSAL.

£9 9s. ALDIS ENSIGN ENLARGER, plano-anastigmat lens, £4 4s. Chemist, Leagrave, Luton.

WANTED.

SMALL HAND SODA WATER MACHINE; any condition. "Rosenby," 7 McArthur Street, Wick.

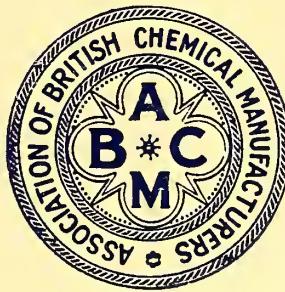
SHOP FITTINGS.—Wanted, nest of 8 Counter Drawers, Corks, Paper and Labels. Duck, Chemist, Cardiff.

STOKES' MULTIPLE TABLET MACHINE. Condition and price to Philip Harris & Co., Ltd., Edmund Street, Birmingham.

GOWER, Chemists' Bookseller, 41 Voltaire Road, Clapham, wants Pharmaceutical Books, including B.P., Pharmaceutical Formulas, B.P.C., P.J.F., Optical Books.

IN GOOD CONDITION.—Bound volumes of "Chemist and Druggist," 1890 to 1902 and 1914 to 1928, also of "Pharmaceutical Journal," 1890 to 1900 and 1914 to 1928; state price. Address 164/806, Office of this Paper.

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